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SECOND QUARTO SERIES.—VOL. XXXVIII., No. 39.]

NEW YORK, OCTOBER 7, 1882.

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CONSOLIDATION.

ARTICLES of consolidation and amalgamation of the San Luis Obispo and Santa Maria Valley Railroad Company with the Pacific Coast Railroad Company were filed with the Secretary of State of California, on the 21st ult.

ARTICLES of consolidation were entered into on the 27th of September between the Joplin and Arkansas Northern Railroad, of Missouri, and the Arkansas Northern Narrow-Gauge Railroad. The line of the latter will begin at Van Buren and run northwardly through Crawford, Washington and Benton counties to McDonald County, Mo. The consolidated road will be hereafter known as the "St. Joseph, Kansas City and Arkansas Railroad Company." It is understood that work will soon begin on the line.

THE Atlantic and French Broad Valley Railroad of South Carolina, the Cumberland Railway of Kentucky, the Morristown, Cumberland Gap and Ohio Railroad of Tennessee, and the Morristown and Carolina Railway were consolidated at Columbia, S. C., on the 2d inst., under the name of the "Carolina, Cumberland Gap and Chicago Railway Company." The consolidated road runs from Aiken, S. C., to Livingston, Ky., a total distance of 368 miles. The whole road is to be completed by 1888, and the line from Aiken to Abbeville, S. C., will be finished and in working order by July, 1883. Under the organization South Carolina has five directors, North Carolina one, and Tennessee five. Gov. Hagood, of South Carolina, was elected President, O. C. King, of Tennessee, Vice-President, and S. S. Campbell, of New York, Secretary and Treasurer of the consolidated lines. Capt. W. J. Kirk was elected Chief Engineer of the Southern Division of the road, comprising the two Carolinas, and the headquarters of the company have been established at Aiken, S. C. The contract for building the road has been awarded to a company of capitalists called the Atlantic and Northwestern Construction Company, of New York, of which W. H. Schofield is President. The contractors agree to build and equip 100 miles of the road per year until the whole line is completed, work to be commenced at Aiken within 90 days. Bonds will be issued at once at the rate of \$20,000 per mile of first mortgage, and at the rate of \$15,000 per mile of second mortgage classes, amounting altogether to about \$17,000,000. These bonds will be floated as soon as issued, arrangements for their hy-

pothecation having been already effected. As soon as Gen. Hagood's term of office as Governor of South Carolina expires he will give the construction of the road his immediate supervision. The new road will traverse the finest portions of South Carolina, North Carolina, Tennessee, and Kentucky, and will open up direct communication by way of the South Carolina Railroad between Charleston and the Northwest. The road will connect with the South Carolina Railroad at Aiken, with the Charlotte, Columbia and Augusta Railroad at Trenton, with the Augusta and Knoxville at Troy, with the Atlanta and Charlotte Air-line Railroad at Easleys—all points in South Carolina; with the Western North Carolina Railroad at Waynesville, N. C.; with the East Tennessee, Virginia and Georgia Railroad at Morristown, Tenn., and with the great Kentucky system of railroads to all points North and West at Livingston, Ky. The road will cross the Blue Ridge Mountains through Eastatoe Gap without tunneling, and at a comparatively easy grade. Altogether, the consolidation of the various railroads which make up this great trunk line is one of the most important railway enterprises ever undertaken in the South.

ORGANIZATION.

At a meeting of the Gold and Stock Telegraph Company, held in this city on the 26th ult., the following Board of Directors was elected: Norvin Green, William K. Bliss, William A. Wheelock, Jay Gould, George J. Gould, Thomas T. Eckert, E. D. Morgan, Augustus Schell, John Van Horne and J. O. Green. The old officers were re-elected at a board meeting held after the annual meeting.

At a recent meeting of the stockholders of the Ohio River and Indiana Railroad the following Board of Directors was elected: Isaac B. Hyner, John C. Hassenier, C. A. Layton, James Wilson, M. D. Shaw, John M. Leiter and C. W. Timmermeister. The officers chosen are as follows: President, Isaac B. Hyner; vice-president, James Wilson, secretary, C. A. Layton; treasurer, John C. Hassenier.

At the annual meeting of the stockholders of the Metropolitan Trust Company, held in this city on the 3d inst., the following gentlemen were elected trustees for the ensuing year: C. P. Huntington, M. K. Jesup, A. Gracie King, Thomas Hillhouse, Frederick D. Tappen, Parker Handy, James J. Higginson, Dudley Olcott, George A. Hardin, Phineas Prouty, J. Howard

King, Bradley Martin, Isaac N. Phelps, J. J. Terry, D. O. Mills, J. W. Drexel, H. W. Jewett, E. D. Morgan, Jr.; O. P. Buel, Freeman Clarke, E. B. Hudson, John F. Slater, W. J. Hatch, H. R. Bishop, H. E. Pellew.

At the annual meeting of the Danville, Olney and Ohio River Railroad Company, held at Kansas, Ill., on the 20th ult. the old Board of Directors was re-elected. At a subsequent meeting of the directors the following officers were chosen: President, Parker C. Chandler; vice-president and general manager, James R. Maxwell; treasurer, Charles A. Hovey, and secretary, Wm. H. Brown. There are no changes in the officers of the company, except by the election of James R. Maxwell, hitherto chief engineer of the road, in place of Charles Howard, who remains upon the Executive Committee.

At the annual meeting of the New York Clearing House Association, held on the 3d inst., the following officers were elected for the ensuing year: President, F. D. Tappen; secretary, H. H. Nazro; manager, W. A. Camp, Clearing House Committee—Benj. B. Sherman, Geo. G. Baker, Wm. L. Jenkins, O. D. Baldwin, Richard King. Conference Committee—Geo. S. Coe, Percy R. Pyne, Henry W. Ford, Chas. F. Hunter, Jas. D. Fish. Nominating Committee—Alex. Gilbert, G. G. Brinckerhoff, Zenas E. Newell, Wm. J. Quinlan, Jr., E. K. Wright. Committee on Admissions—W. A. Hall, Geo. J. McGourkey, Geo. H. Wyckoff, J. L. Jewett, A. S. Frissell. Arbitration Committee—J. L. Everitt, E. D. Randolph, James T. Woodward, John Parker, D. C. Hays.

INCORPORATION.

THE Stevens Locomotive Company, of New York, capital \$1,000,000, was incorporated on the 28th ult., at Albany.

ARTICLES of incorporation have been filed with the Secretary of State of Ohio, of the Youngstown and Austintown Railway Company, branch line.

THE Illinois, Iowa and Minnesota Railway Company has been incorporated with a capital of \$2,000,000. The route of the road is to be from Streator, Ill., to the Mississippi River at or near Clinton, Iowa.

ARTICLES of incorporation were filed in the office of the Secretary of State of California, on the 21st ult., of the Pacific Coast Railway Company. The directors are: Chas. Goodall, Will,

iam Norris, John Rosenfeld, John L. Howard, W. H. Knight and S. O. Putnam. Capital stock, \$2,628,500, divided into 26,285 shares. Principal place of business, San Francisco.

The following companies were incorporated at Albany, N. Y., on the 2d inst: The Commercial Telegram Company; capital, \$50,000. [The lines of the company are to run from New York to different cities in this and other States.] The Mexican Northern Telegraph and Telephone Company, of New York; capital, \$200,000. [Its line is to run from New York through the State of New Jersey, and thence in a southwesterly direction to the city of Laredo and other cities in Mexico.]

ARTICLES of incorporation have been filed with the Secretary of State of Illinois, by the Kaskaskia River, St. Elmo and Southern Railway Company, which proposes to construct a railroad from a point in Shelby county, on the line of the Toledo, Cincinnati and St. Louis Railroad, through the counties of Effingham, Fayette, Marion, Jefferson, Franklin, Williamson, Jackson and Union, to a point on the line of the Cairo and St. Louis Railroad. The principal office of the company is to be located at St. Elmo, and the capital stock is to be \$500,000. The corporators are Benjamin F. Johnston, Presby M. Johnston, John B. Leach, William H. Smith, Bowles C. Smith, J. Harvey Johnston, Arthur G. Brown, Alexander M. Johnston, Leander R. Stocker and Joseph Micks, all of St. Elmo, and Malcolm E. Williams, of Effingham.

CONSTRUCTION.

TRAINS on the Santa Maria Railroad commenced running to Los Alamos on the 1st inst.

THE Jacksonville (Fla.) and Atlantic Beach Railroad is to be completed by the 1st of May next.

THE North Shore Railway is to be extended to Tadousac, where a winter Canadian port will be established.

THROUGH passenger trains from Fortress Monroe were put on the Chesapeake and Ohio railway on the 2d inst. Two trains are run daily.

THE Canadian Pacific Railway for 447 miles west of Winnipeg, and nearly 50 west of Moose Jaw Creek, is now complete, and sleeping-cars are running.

ADVICES from Magdalena state that the gap between the Sonora Limited and Benson railroads is thirty miles. Connection will be made about October 20th.

THE formal opening of the Canada Atlantic Railroad took place on the 30th ult., an excursion party of about 200 persons going from Ottawa to Cateau at the invitation of the company.

THE last spike in the completion of the Live Oak (Fla.) and Rowland's Bluff Railroad was driven on the 29th ult. The road is five feet gauge and standard, and first-class in its construction and equipment.

THE construction of the Western North Carolina Railroad is progressing rapidly. On the line between Asheville and Ducktown 700 hands are employed. Twenty-four miles of the road,

running as far as Waynevile, are completed and in running order. The line from Asheville to Ducktown is about 80 miles in length.

THE New Orleans Pacific Railroad, from New Orleans to Shreveport, has been turned over to and consolidated with the Texas and Pacific Railway, and there is now no line of the former name in existence. It is all the Texas and Pacific, from El Paso to New Orleans.

THE Erlanger syndicate have completed their route via Akron, on the Alabama and Great Southern division of the Cincinnati, New Orleans and Texas Pacific, to Selma, making a line to Selma independent of the Louisville and Nashville, and East Tennessee, Virginia and Georgia railways.

ENGINEERS have begun running a line for a railroad from Delmar, Del., to Cherrystone, Va. It will cross the Eastern Shore Railroad one mile below Salisbury, and will touch New Church, Drummondton, Temperanceville and other Virginia towns. It is proposed to build a branch from New Church to Chincoteague Bay, and another branch to Onancock, which is two miles from the main line.

THE track of the Wisconsin Central Railroad is now nearly completed from Neenah south to Oshkosh, 20 miles, running parallel and close to the track of the Chicago and Northwestern Railway as far as that important point. From Schleisingerville north about 10 miles have been laid. The entire track will be completed about October 16, and through trains will be put on soon after that.

ARRANGEMENTS have been completed by which Edward Bates Denny, president of the United States Mining and Investment Company, with its headquarters in this city, in connection with English capitalists, will undertake the construction of the Ottawa and Gatineau Valley Railroad. It is said that there is a scheme on foot to amalgamate this company with the Ottawa, Waddington and New York Railway and Bridge Company.

THE Chenango and Allegheny Valley Railroad Company are building an extension of their main line from Coalville, a point near their present terminus, to Butler, Butler county, a distance 25 miles, where it will connect with the lines of the Western Pennsylvania Railroad Company. The latter have made an arrangement with the Chenango and Allegheny Valley Railroad Company for the transfer of traffic over the new branch, giving the Pennsylvania Railroad a new outlet for coal and other freight to the Lake regions and the northwest.

THE Milwaukee and Northern Railroad Company is receiving 1,000 tons of steel rails per month for the Wisconsin and Michigan. Track-laying on this route is being pushed at the rate of one-half mile per day, and the road is down for eight miles north of Stiles. Winter will not interfere with track-laying, as the grading is far enough ahead to keep the track-layers busy should a heavy freeze set in at once. The road will reach Ontonagon early next season. This road has just received three new locomotives, Nos. 12, 14 and 15. Two are Baldwins and one is a Brooks machine, and they cost about \$37,000. This makes fifteen engines in all on the road.

Nashville, Chattanooga and St. Louis Railway.

THE lines now operated by this company are as follows: Nashville, Chattanooga and St. Louis, Main Stem, 321 miles; Shelbyville Branch, 8 miles; Jasper Branch, 19 miles; Fayetteville Branch, 40 miles; McMinnville Branch, 48 miles; Lebanon Branch, 30 miles; Centerville Branch, 25 miles; Duck River Valley Railroad, leased, 48 miles—total, 539 miles.

The gross earnings of the main stem and branches for the year ending June 30, 1882, were:

Main Stem.....	\$1,882,780 52
Lebanon Branch.....	62,166 96
McMinnville Branch.....	44,741 41
Fayetteville Branch.....	37,481 08
Centerville Branch.....	17,350 66
Duck River Valley Railroad.....	30,662 07
	\$2,074,582 70

Operating expenses, viz:

Main Stem.....	\$1,114,561 79
Lebanon Branch.....	24,130 89
McMinnville Branch.....	30,514 64
Fayetteville Branch.....	24,978 25
Centerville Branch.....	14,691 96
Duck River Valley Railroad.....	32,112 90
	1,240,990 43

Net earnings:

Main Stem.....	\$768,218 73
Lebanon Branch.....	38,036 07
McMinnville Branch.....	13,626 77
Fayetteville Branch.....	12,508 83
Centerville Branch.....	2,658 70
Duck River Valley R. R., loss	1,450 83
	\$8,33,592 27

The sources whence the earnings of the main stem and branches were derived are as follows:

From freight	\$1,364,066 85
" passengers	579,847 40
" mail service	51,552 80
" rents and privileges	79,115 65

Total, as above	\$2,074,582 72
Less operating expenses	1,240,990 43

Leaving net earnings	\$833,592 27
The interest and taxes were	583,577 37

Leaving a surplus of	\$250,014 90
There were also received dividends on stock investments	39,06 20

Increasing the surplus to	\$289,021 10
The surplus of \$833,592, after paying interest and taxes, was	336,496 60
Balance of the proceeds of sale of \$1,000,000 second mortgage bonds after expenditures shown in last report	566,569 73

Total surplus for the year	\$1,192,087 43
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There has been paid :

Two dividends, one of 3 per cent and one of 1½ per cent ..	\$300,164 94
For improvement of track ..	352,316 16
For new iron bridges ..	61,302 45
For new engines ..	104,128 35
For new cars ..	255,423 62
For buildings, fences, elevators, real estate, side tracks, etc.	226,827 10
For McMinnville extension ..	46,231 49
For Centerville extension ..	80,426 08
For Duck River extension ..	85,774 80
	1,512,594 96

Showing an excess of payments over receipts of	\$320,507 53
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—which, with the cash on hand June 30, accounts for the increase of the floating debt, all of which, the report says, can be liquidated by the sale of the bonds authorized to be issued upon the completion of the McMinnville and Centerville extensions, and the disposition of the \$144,000 Duck River bonds held by the Company.

A further analysis of the report shows that the earnings of the main stem were, from freight \$1,243,859.87; passage, \$516,317.12; mails, \$43,487.88; rents and privileges, \$79,115.65. Of the Lebanon Branch: from freight, \$34,187.15; passage, \$26,463.13; mails, \$1,516.68. Of the McMinnville Branch: from freight, \$29,592.13;

passage, \$13,034.28; mails, \$1,515. Of the Fayetteville Branch: freight, \$24,767.21; passage, \$10,988.15; mails \$1,725.72. Of the Centerville Branch: from freight, \$10,112.54; passage, \$5,442.62; mail, \$1,795.50. Of the Duck River Valley Railroad: from freight, \$21,547.95; passage, \$7,602.10; mails, \$1,512.02. Total earnings of main stem as branches, as above stated, \$2,074,583.70.

Compared with the preceding year, the gross earnings show a decrease of \$181,603, with a decrease in operating expenses of \$137,186, making a decrease in the net earnings of \$44,417. The report says:

The extension of the Duck River Valley Railroad, from Petersburg to Fayetteville, 13 miles, was completed in April last, and trains have been running since June 1. This extension was made in accordance with the lease of the Duck River Railroad, at a cost to your Company of \$115,815.70. In addition to this sum, there is due the N., C. & St. L. Railway, \$15,766.96, for moneys advanced to pay the floating debt of this road, making a total of \$131,582.66. To offset this expenditure your Company holds \$69,500 first mortgage, and \$75,000 second mortgage bonds of the Duck River road, which, when sold, will be sufficient to repay the sums advanced.

An agreement was entered into with White County for the extension of the McMinnville road from Rock Island to Sparta; White County agreeing to turn over to your Company \$30,000 of its bonds when the road is finished four miles beyond Caney Fork river, also to provide the right of way. In pursuance of this agreement, work was commenced on the extension in September, 1881, and it is expected to be completed by January next.

The Centerville Branch has been extended from Graham to Mill Creek, about four miles, and trains have been running since December, 1881. The grading of five miles more has also been completed, and iron is now being laid, and a contract for the remaining three miles, to Duck River, has been entered into, and the road will be ready for operation, within two miles of Centerville, by October 15th, and to the north bank of the river by December 1st. There are large deposits of iron ore two miles west of Graham station, which, together with the lumber, agricultural products and pig iron from Warner furnace, will afford all the business that can be done upon the Centerville Branch with its present equipment.

An agreement has been made with the Tennessee Coal, Iron and Railroad Company to extend the Jasper Branch from Victoria to Inman, about 5½ miles, for the purpose of rendering accessible the immense deposits of iron ore at that point. The Coal Company believe they will ship fifty to sixty cars per day, and guarantee the shipment of thirty cars of ore daily, over this extension. The Coal Company also agree to construct the road at their own expense and turn it over to your Company, when finished, in consideration of the issuance and delivery, to them, of Nashville, Chattanooga and St. Louis Railway forty year six per cent bonds, secured by a first mortgage on the extension, to an amount, at their par value, equal to the cost of the road, not exceeding, however, \$16,000 per mile. It is expected that this extension will be completed and in operation by December next.

During the year 18 miles of 58-lb. steel rail were laid upon the Chattanooga division, and 11.76 miles upon the Northwestern division, a total of 29.76 miles. There were also 11.32 miles of re-rolled iron rails laid upon the Northwestern Division, 6.59 miles upon the branches, and 9.83 miles of new side track were constructed; and 35 miles of the Chattanooga division, and 13½ miles of the Northwestern

division were ballasted. On the main line 221,050 cross ties and 108 sets of switch ties were put in the track, and 57,134 cross ties and 13 sets of switch ties were used upon the branches. There were also constructed 11,617 feet, or over two miles, of bridging and trestling. Extensive improvements have been made upon the depots along the line, and new ones erected. An elevator has been built at Hickman, 50 by 100 feet, four stories high, with a hoisting capacity of 6,000 pounds, the expenditure upon which and the wharf amounted to \$17,223.57.

The equipment of the road has been increased during the year by the purchase of 8 new ten-wheel engines, and the construction of 3 passenger engines, making the number now on hand, 87, most of which are in good running order. There have also been added by purchase 4 new coaches, 2 postal cars, 300 box and 100 flat cars. The car equipment now consists of 40 passenger coaches, 14 baggage, 4 mail, 1 pay, 52 stock, 538 flat, 1,272 box, and 2 wrecking cars and 1 pile driver—all of which have been fitted with the Miller platform and coupler and the Westinghouse brake. The mileage of engines during the year was 1,979,923, against 2,151,673 for the year preceding. The cost per mile of motive power, including repairs, fuel, wages, etc., was 15.19 cents.

The car mileage for the year was: passenger, 1,603,878; sleeping, 257,862; baggage, 682,701; mail, 122,754; freight, 15,384,624—total, 18,051,819. The passenger train mileage of the entire main line was 546,798, and the earnings per mile \$1.08; freight train mileage 884,681, earnings \$1.46—total train mileage 1,431,579, total earnings per mile 1.315, expenses .778, net .537.

The total number of tons carried on the Chattanooga division was 997,140, and on the Northwestern division 147,990—total, 1,145,130. The total number of passengers carried was 341,323, of whom 172,089 went west and 169,234 east.

In 1880 the local passenger rate was reduced from five to four cents per mile, which showed such satisfactory results that in November, 1881, a further reduction was made to three cents per mile; the former reduction resulted in an increase in revenue of \$23,250 over the five cent rate, and the latter in a further increase of \$13,165.57 over the four cent rate—the increase in favor of the three cent rate over the five cent rate was \$36,415.65. A three cent rate, the report says, is considered the minimum by practical railroad managers as profitable to the lines, and it is now being generally adopted by southern roads, while it is deemed sufficiently low to meet the views of the public and promote travel.

The mortgage debt, as per last report, was \$8,147,000, since which time there has been issued \$992,000 main stem first mortgage 7 per cent bonds, and \$6,000 Duck River Valley second mortgage endorsed 6 per cent bonds; and there has been redeemed \$494,000 endorsed and \$2,000 unendorsed 6 per cent bonds of the Nashville and Chattanooga Railroad—leaving the mortgage indebtedness at the close of the fiscal year \$8,649,000. The \$992,000 first mortgage bonds were issued in lieu of \$500,000 bonds due the United States, which were redeemed June 1, 1881, and the \$494,000 endorsed bonds

redeemed July 1, 1881. The proceeds of the \$6,000 Duck River Valley bonds were used in reimbursing the company on account of the sum paid on the floating debt of that road, as provided in the lease made October 2, 1879.

COST, RESOURCES AND LIABILITIES.

Total cost of road to June 30th, 1882.....\$15,711,488 93

RESOURCES.

Due from transportation department.....	\$ 17,242 62
Bills receivable.....	7,186 62
Sundry railroads and persons..	104,703 25
Sundry railroad and other stocks and bonds	386,040 00
Real estate (not used for railroad purposes).....	84,245 85
Centerville Branch, construction account.....	112,526 90
Centerville Branch, extension..	98,027 07
McMinnville Branch, extension	26,264 88
Jasper Branch, extension.....	689 00
Duck River Railroad, extension	115,815 70
Duck River Railroad, floating debt.....	17,848 81
Shop and road supplies.....	68,179 28
Cash in Nashville.....\$119,445 52	
Cash in New York.....297,090 82	
	416,536 34
	1,455,307 22
	\$17,166,796 15

LIABILITIES.

Capital stock.....	\$ 6,670,331 20
Bonds endorsed by State of Tennessee	402,000 00
First Mortgage bonds, main stem.....	5,894,000 00
Second Mortgage bonds, main stem.....	1,500,000 00
First Mortgage bonds, Jasper Branch.....	90,000 00
First Mortgage bonds, Lebanon Branch.....	300,000 00
First Mortgage bonds, Fayetteville and McMinnville Branches.....	398,000 00
Second Mortgage bonds, D. R. V. R. R. endorsed by N. C. & St. L. Ry.....	65,000 00
	8,649,000 00
Bills payable.....	659,687 46
Due sundry railroads and persons.....	102,493 40
Bills and pay rolls unpaid.....	75,664 99
Interest due July 1st, 1882.....	279,610 00
Interest accruing during the war on bonds held by the U. S. Government	153,600 00
Back dividends.....	14,569 14
Dividend No. 24, due April 1st, 1882.....	48,444 85
	1,334,069 84
Profit and loss account.....	513,395 11
	\$17,166,796 15

President.—JAMES D. PORTER.

Directors.—James D. Porter, J. H. Inman, V. K. Stevenson, J. W. Thomas, G. A. Washington, Thos. C. Whiteside, G. M. Fogg, J. W. Childers, Thos. Lipscomb, T. W. Evans, M. H. Smith, E. L. Jordan, Henry Earle, Thomas O'Conner, A. S. Colyar.

Gen'l Superintendent.—J. W. THOMAS.

Resident Engineer.—R. C. MORRIS.

Sec. and Treas.—R. C. BRANSFORD.

A CONTRIVANCE for the use of street cars is said to have been invented in France, and to have been in use on a line in that country since 1878, during which time 14 cases have occurred of persons falling in front of the wheels of the cars who have been caught up by it and thrown aside with comparatively slight injury. The apparatus is known as a "man-catcher," and consists of an iron frame immediately in front of the wheels, reaching to within a short distance of the car track, attached to the journals of the wheels. In front of this frame projects a short distance a shoe-shaped piece of iron reaching to within one and a half inches of the ground. This simple and inexpensive contrivance is intended to catch up unfortunate persons who may fall in front of the car and throw them aside out of the way of the wheels.

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ESTABLISHED 1841.

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We invite railroad officers to send us notice of elections, transfers, appointments, resignations, etc.; and all our readers would oblige us by furnishing for our columns any items of personal information, that may come to their knowledge, adapted to this department. We aim to record all new railway enterprises in the United States and Canada, and to note the progress of construction on all new roads and extensions; and we request all concerned in railway building to give us early information regarding the above, that our report may be as complete as possible.

Subscribers are requested to report to our office any irregularity in receiving the JOURNAL.

Contributed articles relating to Railroad matters generally, Mining interests, Banking and Financial items, Agricultural development, and Manufacturing news, by those who are familiar with these subjects, are especially desired.

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New York, Saturday, October 7, 1882.

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It is pretty well understood that the Bessemer rail manufacturers have concluded to assent to a reduction of the duty on rails to \$14 a ton, or just one-half of the present tax. As a result, orders are being taken for delivery during the coming year at about \$40 per ton. The combination is not quite as wise as it should be. Ten dollars a ton is margin of protection enough. The free traders of the South and West are liable to concentrate and abolish the duty altogether.

A SON once attempted to reason with his father upon the subject of gambling, claiming that his money was his own and he had a right to do with it as he pleased. His father replied that he would not argue with a person that would endeavor to convince him that gambling was right; he would put him far from him. Gambling, he said, was against the law of the land, it was against the law of God and the law of man, against the Divine law and the moral law. Gambling, he continued, leads to drunkenness, it leads to stealing, it leads to suicide, it leads to murder—to the State prison, the gallows and the grave. What more argument did the young man want?

THE disposition of the great army of invalids and pleasure seekers to visit a warmer climate for the winter season is on the increase. The Mediterranean and the Bermudas cannot be reached without a stormy sea voyage. Florida is low, flat and damp, and more fatal to weak lungs than the North. Southwest Texas, though dry, is subject to cold "Northerns." Southern California promises to be quite a rival for the class of travelers who have hitherto gone to Florida. The trip to Los Angeles can now be made in about six days from New York, and the climate there is perfect. San Diego, Santa Barbara and Ventura, in the same vicinity, have a reputation for pulmonary help. At Monterey, within 3½ hours of San Francisco, is a hotel and grounds which have cost nearly a million of money, which is crowded with Eastern visitors summer and winter. A party of 150 persons is making up in Boston to start in December and spend the winter there. The sea bathing and flowers and fruits are available all the year round.

THE "National Mineral and Industrial Exposition Association of Nashville, Tenn," was recently organized in that city, and the charter duly signed and registered. The Incorporators and Directors are: Col. J. B. Killebrew, Gen. Ira P. Jones, Dr. Thos. A. Atchison, Capt. Wm. Stockell, Wm. Porter, Robert Thompson, Wm. M. Duncan, Judge Pitkin C. Wright, A. H. Robinson, Gov. James D. Porter, Col. E. W.

Cole, John M. Bass, M. M. Kline, Major A. W. Willis, and Gen. W. H. Jackson. The Association is to have a capital of \$300,000, divided into 6,000 shares of \$50 each. It is the intention of the Directors to meet at once, elect officers, open books of subscription, and go actively to work; the object of the Association being to make preparations for the holding of a National Mineral and Industrial Exposition in Nashville in the fall of 1883 or 1884, and to make it the finest and best this country has ever witnessed. Nashville has always done well and thoroughly all that she has ever attempted, and it is believed that she will in this instance surpass all that she has ever done before.

LOUISVILLE AND NASHVILLE'S DIFFICULTIES.

THE center of attraction in Wall street during the past few days, and in a less degree during the last few weeks, has been the stock of the Louisville and Nashville Railroad Company. The managers of this road have, during the past few years, adopted the policy of annexation and enlargement of their system, so that it has added to the original Louisville and Nashville Railroad at both ends, and now it reaches Cincinnati and Lexington at the North, and New Orleans, Mobile and Pensacola on the Gulf, and Georgia coast ports on the southeast. More recently, it is said, an effort has been made to capture the Eastern Illinois Railroad with an extension which will give it a very direct connection from Chicago to Louisville. All this has been done in order to head off, or keep pace with, its rivals in the same vast territory. The Louisville and Nashville was threatened on the one hand by the East Tennessee, Virginia and Georgia system, of which Col. Cole was president, and which threatened to capture the line from Nashville to St. Louis. To prevent this, the Nashville, Chattanooga and St. Louis, with its numerous dependencies, was purchased. Further South, it was threatened by what is now known as the Richmond and Danville system, and so was obliged to purchase or lease the line from Montgomery to Mobile and thence into New Orleans at heavy cost. For some reason, not very obvious, the managers elected to build the unfinished line from near Mobile to Pensacola, which cannot be anything but a "sucker" enterprise for many years to come. A majority interest in the Georgia Railroad has also been purchased, and the road leased, though it is not quite clear what advantage is to spring from it. On the West, the road was threatened by the Chesapeake, Ohio and Southwestern, which is now completed from Louis-

ville to Memphis; and on the East, it was threatened by the Cincinnati Southern (ERLANGER's roads), which are being extended into New Orleans, and also into Knoxville and Nashville. Nearer home, a former president of the road, Dr. E. D. STANDIFORD, is threatening to build a line from Louisville to Harrodsburgh, where it will intersect the Cincinnati Southern, and will, together with his line from Louisville to Chicago, form a line competitive from Chicago to New Orleans via Louisville.

These assaults upon its territory from without, and lamentable dissensions in its councils within, and a heavy floating debt, which the management has vainly striven to conceal, have resulted in what may be called a crisis in its affairs; and the meeting of the stockholders to be held at Louisville during the current week has been looked forward to with great interest. Visible results so far are: an important decline in the stock, with heavy dealings at the Exchange, and every evidence of a collapse which nothing but a reorganization, and perhaps a transfer of its control into other and stronger hands, can check. Rumor connects the name of JAY GOULD with the reorganization; but it is hardly probable that he will take hold of an enterprise until the lowest point of demoralization has been reached. The Baltimore and Ohio or Pennsylvania systems will be much more likely to take hold of it. But even these strong concerns will find it a heavy load to carry. The Chesapeake and Ohio is understood to have refused to entertain a proposition of that kind. The ERLANGER syndicate are more directly interested, and the general opinion seems to be that the present management is wholly inadequate. Mr. GREEN, of Rhode Island, for a long time a heavy holder of the stock, is named in connection with the Presidency, but it is not even certain that he retains his large interest, or that he would be of any more use at the head of the board than he has been heretofore. There has been too much gambling in the securities of this company, too much bold financing, and not enough caution.

THE Cincinnati and Georgia extension of the East Tennessee, Virginia and Georgia Railroad was opened for business from Rome to Macon, on the 30th ult.

A CONVENTION of Tennessee land-owners and of persons desiring to make investments in mining, manufacturing and agricultural property in that State is to be held at Mont Eagle Springs, Marion county, on the 17th of October, and continue for three, and perhaps four days. A number of gentlemen from the Northern States, it is stated, are to be present for the purpose of conferring with citizens of the State with the view of making investments or seeking homes there.

The Locomotive Superseding the Stage-Coach.

CORRESPONDENT "S." of the *Pittsburgh Chronicle*, writing from Uniontown, Penn., under date of September 29th, refers to the recent opening of the Redstone Branch of the Pittsburgh, Virginia and Charleston Railroad, over which trains are now running from Pittsburgh to Uniontown via Brownsville, and which he says marks another epoch in the decline of that once famous National highway, the old pike leading from Cumberland, Md., to Wheeling, West Va., than which few roads possess more historic interest. He then adds:—

The proposition to construct a road leading across the Alleghenies, from Washington to the Ohio River, first came up in Congress in 1797, but no definite action was then taken. When Ohio was admitted in 1802 a provision was made that one-twentieth of the proceeds of public lands in that State should be applied to the construction of roads across the Alleghenies. "An act to regulate the laying out and making a road from Cumberland, Md., to the State of Ohio," became a law in 1806. Eli Williams and Thomas Moore, of Maryland, and Joseph Kerr, of Ohio, were appointed Commissioners to locate the road. The route, as at first laid out, followed the path that Washington had trod across the mountains in the French and Indian war, but after emerging from the mountains west it went too far north to take in Uniontown. The citizens of this then small burg believed it would be ruinous to its future if it were left out of the calculations, and hence Ephraim Douglass and others carried the matter to President Jefferson, who, in a special message of February 19, 1808, said: "I have approved the route therein proposed for the said road as far as Brownsville, with a single deviation, since located, which carries it through Uniontown."

The contracts were at once let and the one from Braddock Grove to Uniontown, eleven miles, was reached in 1817. Concerning the rapid building of the road, A. L. Littell, Esq., formerly of Fayette county, Penn., now of Cleveland, Ohio, wrote: "I was there to see it located, and the stakes stuck down the mountain across the old commons south of Woodstock (afterwards Monroe) * * * before a shovelful of earth was displaced, and also to see that great contractor, Mordecai Cochran, with his immortal Irish brigade, a thousand strong, with their carts, wheel-barrows, picks, shovels, and blasting tools, grading those commons and climbing the mountain-side * * * and leaving behind them a roadway good enough for an emperor to travel over."

The first stage-coach bearing the United States mails passed over the road from Cumberland to Wheeling, August 1, 1818. The distance was 130 miles, and the total cost of construction was \$1,700,000. An idea of the care with which the road was to be built may be had from the language of the contractors, which stipulated that the road should be 60 feet in width, the road-bed to be even 32 feet wide, 20 feet of the graduated part to be covered with stone 18 inches deep at the center and tapering to 12 inches deep at the edges, the upper 6 inches of the stone to be broken so as to pass

through a ring 3 inches in diameter, and the lower stratum to be broken so as to pass through a 7-inch ring. The stone part was to be covered with gravel and rolled with an iron-faced roller 4 feet in length and made to bear 3 tons.

The amount of travel over this highway was enormous. The stage-coach entered upon a career of prosperity unparalleled and uninterrupted until the locomotive banished it forever. By this road went to Washington all the public men of the West and many of the South. We have a number of old residents here who still delight to recount the days when they shook hands with Henry Clay, Andrew Jackson and other celebrities who stopped in Uniontown for refreshments.

The driving and wagoning over the road was enormous. So great was the traffic that public houses to accommodate it sprang up all along the route and averaged about one for every two miles of road.

Although so substantially constructed, the heavy travel soon wore out the road-bed, and when it became burdensome to the general government to keep it in repair it was turned over to Pennsylvania, Maryland and Ohio, and these each established gates to collect toll.

In 1830 the stage lines carried 18,000 passengers to and from the Monongahela River steamboats. Some idea of the travel over the road may be imagined from the fact that in 1848 133 six-horse teams were counted passing along in a single day, besides teams of one, two, three, etc. horses.

But the old pike was now in its palmiest days. It was soon to decline. In 1852, the Pennsylvania Railroad was opened to Pittsburgh, and in the same year the Baltimore and Ohio Railroad was completed to Wheeling. Henceforth the rumble of the broad-wheeled freight wagon was gradually silenced, and the once famous highway of illustrious men was rapidly reduced to its present modest character, that of an ordinary avenue of local travel.

THE general passenger agents of Eastern Trunk lines, at a meeting in Chicago, on the 28th ult., elected to issue continuous trip tickets from differential points West to differential points East, similar to those now in use from East to West. These tickets allow no stop over, and are intended to put a check on scalping.

THE Pennsylvania Railroad Company announces that within a month the hackmen will be excluded from the Broad street station in Philadelphia, and twenty hansom cabs and ten "four-wheelers," owned by the company, will take their places. The vehicles will be let to responsible drivers at a fixed price per day, the rate of fare being prescribed by the company. The price for a hansom cab holding two persons will be twenty-five cents for a mile and a half or less, and fifteen cents for any additional mile or fraction thereof. The charge per hour will be sixty-five cents. The price for the "four-wheelers" will be thirty-five cents for a mile and a half or less, and twenty cents for each additional mile or fraction thereof. The charge for a trunk will be ten cents, and for each valise five cents.

Wm. Sellers & Co.

AMONG the manufacturers of iron and steel working machinery, the house of Wm. SELLERS & Co., 1,600 Hamilton street, Philadelphia, and 79 Liberty street, New York, has always occupied a leading position, by the excellent character of their designs and the conscientious accuracy of their work.

This firm was started in 1848 as Bancroft & Sellers and so continued until 1855, when, upon the death of the senior partner, the business passed into the hands of two brothers, William and John Sellers, Jr., who alone constituted the firm until 1873, since which time the firm has consisted of William Sellers, John Sellers, Jr., Coleman Sellers, J. Sellers Bancroft and James C. Brooks.

It was the pioneer in the introduction of the present system of shafting and mill gearing with interchangeable parts; and the present recognized system of transmission of power owes its excellence in a large measure to the efforts of this house.

The present system of shafting and mill gearing as manufactured by this firm is the result of their large and extended experience since 1848; and the advantages of this system may be set forth as follows:—

1. All sizes are made to standard gauges.
2. The double-cone vise coupling admits of quick and easy attachment and detachment.
3. The double-braced ball and socket hangers are light but very strong, and readily adjustable in every direction.
4. Long journal bearings, held so as to always insure a uniform distribution of pressure over the entire length of the bearing.
5. The appropriate distribution of metal in pulley castings, giving the greatest strength with the least quantity of material.

In any large factory the shafting, considered as a machine to transmit motion, is most frequently the largest in the establishment, and the more perfectly the power is transmitted to the work, the more profitable will be its use. The value of high speed in belts has been long known in England and some parts of Europe, and many wonderful examples of its application exist there, but the practice of high-speed shafts and the entire substitution of belting for gear wheels, belong essentially to this country.



DOUBLE-CONE VISE COUPLING.

To obtain this high speed, found advantageous in modern mill practice, the shafts must be straight and truly cylindrical, and must be united by couplings that hold them firmly, and be provided with bearings that will maintain

the shaft in true line, so as with proper lubrication to reduce the friction to a minimum.

The shafting made by Wm. Sellers & Co. is turned accurately, so that a standard gauge will slip the entire length. The coupling consists, as shown in the illustration, of two split cones, drawn by three square bolts into an outside shell, whereby equal pressure is brought to bear upon each shaft, so that the shafts need not be exactly the same size, the cones insuring the shafts being so held that the axis of rotation will be in one and the same line.

This coupling, since its introduction in 1856, has been put to the severest tests, even by blocking the shafts $1\frac{1}{4}$ inches out of line and running for many weeks at 250 revolutions per minute, without loosening under the severe strain. Before the introduction of the swivel hanger, by this firm, rigid bearings, *i.e.*, bearings that would not adjust themselves to the position of the shafts, only were used. The swivel hanger has been superseded by what is called the ball and socket hangers, now in universal use, but although the form was changed the principle remained the same.



BALL AND SOCKET HANGER.

The hanger now in use has the box provided with spherical surfaces on top and bottom, held by adjustable plungers, allowing the box to adjust itself to any position the shaft may assume, and providing for an adjustment in case of settlement of building, shrinkage of supporting timber, etc.

The joint, in truth, copies nature as shown by the ball and socket joint of various bones.

The pulleys are now made with straight arms, and are well proportioned, care being taken in selecting the iron to be used and regulating the conditions of cooling. The straight-armed pulley can be made with the least possible metal and the greatest possible strength, and its form is the best able to transmit the peculiar strain brought to bear upon it, and at the same time it is the most pleasing form to the eye, in contra-distinction to the old heavy curved-arm pulley.

A fixed scale of prices for the various articles comprised under the head of shafting has been introduced by this firm, offering the advantage of giving the net price for any schedule, easily



STRAIGHT-ARM PULLEY.

ascertained by the purchaser, after having the existing rate of discount. As much as this firm has done toward perfecting a system for the transmission of power, it is in the design and manufacture of labor-saving steel and iron working machines that we must look a moment to note the advance they have made in that direction. The rapid advancement of engineering, rendered possible by the invention of machines to do the work required, demands constant addition to the list of such machines; and in this article we can but briefly glance at a few of the principal machines manufactured by this firm. Let us note, in passing, the records of the world's great exhibitions upon the machines exhibited by Wm. SELLERS & Co.

The Paris Exposition Universelle, of 1867, awarded them the highest medal of gold, accompanied by a framed diploma.

At the World's Fair in Vienna, 1873, the Grand Diploma of Honor was awarded, and the recommendation read:—

"Sellers. For pre-eminent achievements in the invention and construction of machine tools, many of which have been adopted as patterns by the constructors of tools in all countries."

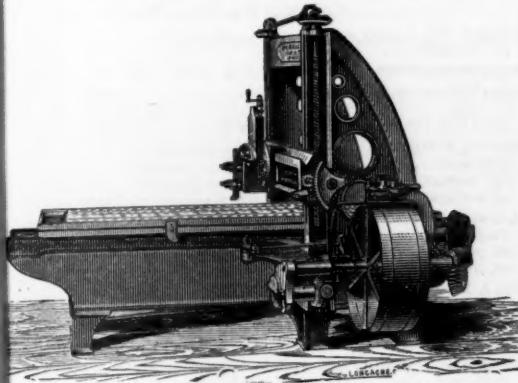
At the International Exhibition in Philadelphia, 1876, the following heading to the report of the Judges was written by Mr. John Anderson, LL.D. C. E., of Woolwich Arsenal, Great Britain, as Examining Judge:—

"For a remarkable collection of machine tools for working metals, when considered in regard to its extent and value, its extraordinary variety and general excellence, as also for the large amount of originality that is shown in the numerous new devices that are introduced, this exhibit is probably without a parallel in the past history of international exhibitions; and, taken as a whole, is worthy of the highest honor that can be conferred. Besides, it is thoroughly national in its characteristics, and pre-eminently worthy of the United States and of the grand occasion of the Centennial Exhibition."

In glancing over the large list of tools manufactured by this firm, comprising a full equipment for a railway or other large shop—such as Lathes, Planer's, Drills, Shapers, Slotters, Punches, Shears, Bending Rolls, etc., we are particularly struck with the novel design of their planer, a brief description of which may prove interesting:

Most conspicuous and important among the various novel features of this machine is the

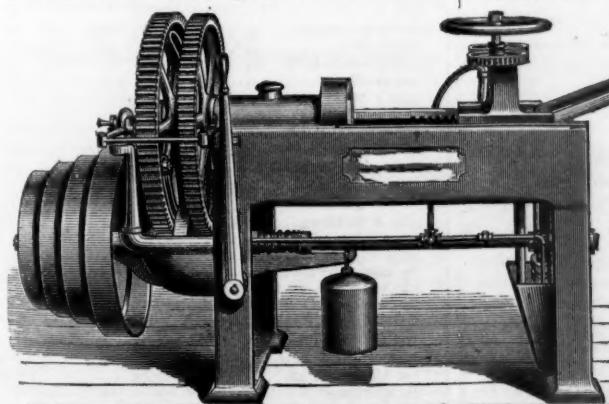
manner of giving motion to the table; this is furnished with a rack, but instead of being operated by the ordinary spur gearing, it receives motion through a peculiar form of spiral pinion upon a driving-shaft, which crosses the bed diagonally and passes out in the rear of the upright on the side where the workman stands. The position of the pulley shaft places the driving-belts within convenient reach of the operator, and its axis being parallel with the line of motion of the table, these machines may be placed parallel with lathes, and thus economize space and permit a better arrangement of workshops. By this simple driving arrangement, a very smooth and uniform motion is imparted to the table. The pinion has four teeth, and is, in fact, a short piece of a coarse screw, the position of the teeth upon the same being as the threads of a screw of deep pitch, and of a like number of threads to that of the teeth in the pinion.



PLANER.

This pinion being placed on the diagonal shafts its action differs from the ordinary spur gear, as also from that of a worm, the motion being that of rolling, rather than a rubbing or sliding one. The feed is also novel in its design and the reversing of the belts an ingenious arrangement of cams locking the belt in any position.

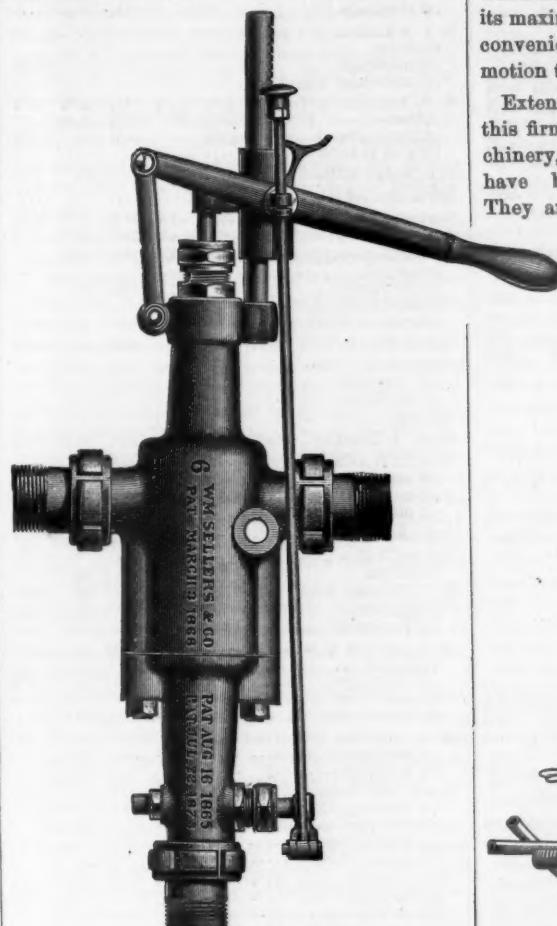
The general design presents a distribution of metal where it will give the greatest strength; and recent experiments have fully proved by practice the great durability of the spiral pinion and rack as used in this planer.



BOLT AND NUT SCREWING MACHINE.

The bolt and nut screwing machines designed and manufactured by this firm present also many novel and valuable features; and in this connection we may mention that the standard American Screw Thread grew out of the investi-

gation of this subject by Mr. William Sellers, who, in an able paper, read before the Franklin Institute of Philadelphia in 1864, presented his reasons for differing with the Whitworth thread, which led the Institute to memorialize Congress, who adopted the Sellers thread as the American standard.



THE "1876" INJECTOR.

The Whitworth or English thread has flat sides at an angle of 55 deg. with the top and bottom of thread rounds determined by dividing the depth of thread into 6 equal parts, inscribing a circle top and bottom within the lines formed by the sides of thread and the top and bottom dividing lines. The American Thread has flat sides at an angle of 60 deg., being easier obtained than 55 deg. and is flat top and bottom by dividing the side of the thread into eight equal parts.

As the wearing surface on all screws will be confined practically to the flat sides, the American thread gives 36 per cent more wearing surface than the English.

The Railway Turn-tables with the Sellers' Patent Conical Steel rollers for center bearing, are so universally used on the railways of this country that we need scarcely mention them.

In 1860, this firm introduced into America the celebrated Giffard Injector for boiler feeding, and were sole makers of this valuable in-

strument during the term of the original patent.

They have made many valuable improvements since, and in 1876 introduced their present form of one-motion injector.

This instrument has self adjustment for the water and has a range of 60 per cent between its maximum and minimum supply, and is as convenient in its manipulation as a single motion to stop, start and adjust can make it.

Extended experience has been acquired by this firm in the manufacture of Hydraulic machinery, and many valuable improvements have been perfected within late years. They are the sole licensees for the Hydraulic system of Riveting of Mr. Ralph Tweddell of England, so popular in that country.



PORTABLE RIVETER.—TWEDDELL SYSTEM.

The works of Wm. Sellers & Co. occupy two full blocks in the heart of the metal manufacturing district of Philadelphia, and employ many hundred hands, and will amply repay a visit to those interested in the advancement of American machinery for working iron and steel.

THE entire route of the South Pennsylvania Railroad, extending from the Susquehanna at Harrisburg to the Youghiogheny, has been surveyed. At the latter point it connects with the Pittsburgh, McKeesport and Youghiogheny Railroad, going into Pittsburgh. The route of the road will be through the following counties in this State: Perry, Bedford, Somerset and Fayette. At Harrisburg it will connect with the Philadelphia and Reading.

A new driver, fresh from the country lyceum was recently initiated into the horse-car business on one of the Norwich routes. The peculiarities of his style in collecting fares excited the mirth of his first car full of passengers. After he had finally collected all the money that he reckoned was due him and escaped to the platform, a couple of girls tittered. He wheeled round solemnly and remarked in the parliamentary language of "Cushing's Manual": "If any of you people hain't paid their fares, they will please manifest it by rising."

THE STOCK EXCHANGES AND MONEY MARKET.

New York Stock Exchange.

Closing Prices for the week ending Oct. 4.	
Th. 28. F. 29. Sat. 30. M. 2. Tu. 3. W. 4.	
Adams Express....	141
Albany and Susq.	
1st mortgage....	
2d mortgage....	
American Express....	96
Burl., C. B. & Nor....	80
1st mortgage 5s....	100%
Canada Southern....	66 1/2
1st mortgage guar....	93 1/2
Central of N. Jersey....	77 1/2
1st mort. 1890....	76 1/2
7s, consol. ass....	110
7s, convertible ass....	110 1/2
7s, Income....	109 1/2
Adjustment....	
Central Pacific....	91 1/2
6s, gold....	114 1/2
1st M. (San Joaq.)....	115
1st M. (Cal. & Or.)....	
Land grant 6s....	
Chesapeake & Ohio....	25
1st pref....	39 1/2
2d pref....	27
1st mort., series B....	86 1/2
Chicago and Alton....	140
Preferred....	
1st mortgage....	
Sinking Fund....	114 1/2
Chi., Bur. & Quincy....	132 1/2
7s, Consol. 1903....	132 1/2
Chi., Mil. & St. Paul....	109 1/2
Preferred....	124 1/2
1st mort., 8s....	124
2d mort., 7 3/4-10s....	123
7s, gold....	
1st M. (La. C. div.)....	
1st M. (I. & M. div.)....	
1st M. (L. & D. ext.)....	
1st M. (H. & D. div.)....	
1st M. (O. & M. div.)....	
Consolidated S. F....	
Chi. & North Western....	145 1/2
Preferred....	165
1st mortgage....	164 1/2
Sinking Fund 6s....	164 1/2
Consolidated 7s....	162 1/2
Consol. Gold bo'ds....	126
Do. reg....	
Chi., R. Ial. & Pac....	135
6s, 1917 c....	133 1/2
Clev., Col., Cin. & Ind....	82
1st mortgage....	81 1/2
Clev., Pittsburgh gr....	78
7s, Consolidated....	
4th mortgage....	108
Col., Chi., & Ind. Cent....	9
1st mortgage....	8 1/2
2d mortgage....	9 1/2
• Del. & Hud Canal....	113 1/2
Reg. 7s, 1891....	114
Reg. 7s, 1894....	
7s, 1894....	
Del., Lack. & Western....	42 1/2
ad mortgage 7s....	141 1/2
1st mortgage 7s....	138 1/2
1st mortgage 7s, 1904 1/2	137 1/2
Consol. 1907....	
Erie Railway....	
1st mortgage....	126 1/2
2d mort. 5s, ext....	
3d mortgage....	100 1/2
4th mort. 5s, ext....	108 1/2
5th mortgage....	108 1/2
7s, Consol. gold....	126 1/2
Great West. 1st mort....	
ad mortgage....	103 1/2
Hannibal & St. Jo....	48
Preferred....	87 1/2
8s, Convertible....	105
Houston & Tex. Can....	83 1/2
1st mortgage....	102
ad mortgage....	121 1/2
Illinois Central....	138 1/2
LakeShore & Mich So....	115 1/2
Consol. 7s....	115
Consol. 7s, reg....	
ad Consolidated....	
Leh. & W. B. con. ass....	
Long Dock bonds....	
Louisville & Nash....	68 1/2
7s, Consolidated....	67
Manhattan....	63 1/2
1st pref....	57 1/2
Met. Elevated....	57 1/2
1st mortgage....	100
Michigan Central....	100
7s, 1905....	99 1/2
Morris & Essex....	126
1st mortgage....	126
New 6s, Bonds....	140
ad mortgage....	138
7s of 1871....	
7s, Convertible....	
7s, Consolidated....	
N. Y. Gen. & Hud. R....	133 1/2
6s, 8. F. 1883....	133 1/2
6s, 8. F. 1887....	102 1/2
1st mortgage....	102 1/2
1st mortgage, reg....	108
N. Y. Elevated....	
1st mortgage....	
N. Y. & Harlem....	
Preferred....	
1st mortgage....	
1st mortgage, reg....	
N. Y. Lake Erie & W....	42 1/2
Preferred....	86 1/2
ad Consolidated....	100
New ad 5s fund....	99 1/2
N. Y. N. Hay'n & Hart....	
North Mo. 1st mort....	
Northern Pacific....	49 1/2
Preferred....	95
Ohio & Mississippi....	38 1/2
Preferred....	38 1/2
2d mortgage....	125
Consolidated 7s....	125
Consol. S. Fund....	
Pacific Mail S. Co....	44 1/2
Pacific R. R. of Mo....	44 1/2
1st mortgage....	105 1/2
2d mortgage....	
Panama....	
Phila. & Reading....	62 1/2
Pitts. Ft. W. & Chi. gtd....	135
1st mortgage....	136 1/2
2d mortgage....	135
3d mortgage....	135
Pullman Palace Car....	128 1/2
1st mortgage....	129
2d mortgage....	128
Quicksil'r Min'g Co....	
Preferred....	
St. Louis & San Fran....	
Preferred....	60 1/2
1st Preferred....	60
2d pref....	58
1st Preferred....	59
St. L. Alt'n & T. H....	86
Preferred....	87 1/2
1st mortgage....	84
2d mort. pref....	114 1/2
Income bonds....	
St. L. Iron Mt. & S....	
1st mortgage....	
2d mortgage....	113
Toledo and Wabash....	
1st mortgage....	
2d mortgage....	
7s, Consolidated....	
St. Louis Division....	
Union Pacific....	111 1/2
1st mortgage....	108 1/2
Land Grant 7s....	110
Sinking Fund 8s....	118
United States Ex....	
Wabash, St. L. & Pac....	36
Preferred....	67 1/2
New mort. 7s....	66 1/2
Wells-Fargo Ex....	
Western Pacific b'ds....	
Western Union Tel....	88 1/2
7s, S. F. conv., 1900....	88 1/2
FEDERAL STOCKS:—	
U. S. 4s, 1907, reg....	
U. S. 4s, 1907, coup....	119 1/2
U. S. 4s, 1891, reg....	112 1/2
U. S. 4s, 1891, coup....	112 1/2
U. S. 5s, cont'd at 3 1/2....	
U. S. 6s cont'd at 3 1/2....	
Dt. of Col. 3-6s, reg....	
Dt. of Col. 3-6s, coup....	
Boston Stock Exchange.	
Closing Prices for the Week Ending Oct. 4.	
Th. 28. F. 29. Sat. 30. M. 2. Tu. 3. W. 4.	
Atch., Top. & San. Fe....	93 1/2
1st mortgage....	120
Land Grant 7s....	
Boston & Albany....	175
Boston and Lowell....	102
Boston & Maine....	
Boston & Providence....	
Bos'n, Hart. & Erie 7s....	
Burl. & Mo. R. L. G. 7s....	
Burl. & Mo. R. in Neb....	
6s, exempt....	
4s....	
Chi., Burl. & Quincy....	132 1/2
Cin., Sand&Clev. (\$50)....	27 1/2
Concord (\$50)....	
Connecticut River....	
Eastern....	
New 6s, Bonds....	
Fitchburg....	
N.Y. & New England....	56
7s....	116
Northern N. H....	
Norwich & Worcester....	
Ogden & Lake Cham....	
Old Colony....	139
Ph., Wil. & Balt. (\$50)....	
Portl'd, Saco & Ports....	
Pueblo & Ark Val 7s....	
Pullman Palace Car....	
Union Pacific....	111 1/2
6s....	116
Land Grant 7s....	
Sinking Fund 8s....	
Vermont & Mass....	
Worcester & Nashua....	
Cambridge (Horse)....	
Metropolitan (Horse)....	
Middlesex (Horse)....	
Cal. & Hecla Min'g Co....	
Quincy....	
Philadelphia Stock Exchange.	
Closing Prices for the Week Ending Oct. 3.	
W. 27. Th. 28. F. 29. Sat. 30. M. 2. Tu. 3.	
Allegh'y Val. 7 3-10s....	
7s, Income....	
Buff., Pitts. & West....	21 1/2
Cam'dn & Am. 6s, '83....	
6s, 1889....	
Mort. 6s, 1889....	
114 1/2	
Camden & Atlantic....	
Preferred....	
1st mortgage....	
2d mortgage....	
Catwissa....	
Preferred....	
2d pref....	
7s, new....	120
Del. & Bound Brook....	
7s....	
Elmira & Williamspt'....	
Preferred....	
St. Louis & San Fran....	
Preferred....	
1st Preferred....	100
2d pref....	97
St. L. Alt'n & T. H....	
Preferred....	86
1st mortgage....	87 1/2
2d mort. pref....	110 1/2
Income bonds....	
St. L., Iron Mt. & S....	
1st mortgage....	
2d mortgage....	113
Toledo and Wabash....	
1st mortgage....	
2d mortgage....	
7s, Consolidated....	
St. Louis Division....	
Union Pacific....	111 1/2
1st mortgage....	108 1/2
Land Grant 7s....	110
Sinking Fund 8s....	118
United States Ex....	
Wabash, St. L. & Pac....	36
Preferred....	67 1/2
New mort. 7s....	66 1/2
Wells-Fargo Ex....	
Western Pacific b'ds....	
Western Union Tel....	88 1/2
7s, S. F. conv., 1900....	88 1/2
Lehigh Valley....	66 1/2
1st mort. 6s, coup....	66 1/2
1st mort. 6s, reg....	66 1/2
2d mort. 7s....	
Consol. mort. 6s....	
Consol. mtg. 6s, reg....	
Little Schuykill....	
Minehill & Sch. Hav'n....	
North Pennsylvania....	
1st mortgage 6s....	64 1/2
2d mortgage 7s....	
Genl. mtg. 7s, coup....	125
Genl. mtg. 7s, reg....	
Northern Central....	56 1/2
5s....	97 1/2
Northern Pacific....	49 1/2
Preferred....	94 1/2
94 1/2	95 1/2
Pennsylvania R. R....	94
63 1/2	94
1st mortgage....	63 1/2
Glen'l mort....	
Glen'l mort. reg....	
Consol. mort. 6s....	
Consol. mort. reg....	
Pa. State 5s, new....	117 1/2
do 4s, new....	116 1/2
do 3 1/2s, 1912....	
Phila. & Reading....	31 1/2
1st mortgage 6s....	31 1/2
7s of 1893....	
7s, new convert....	
Consol. mort. 7s....	
Consol. mort. reg....	
Gen'l mort. 6s....	
95 1/2	95 1/2
Def. Income bonds....	
Philadelphia & Erie....	23 1/2
1st mortgage 5s....	105 1/2
2d mortgage 7s....	
Pitts., Tit. & Buff. 7s....	
Schuykill Navi'tn....	
Preferred....	
6s, 1895....	
6s, 1907....	
United Co. of N. J....	190
Honesville, (Horse)....	190
Chestnut & Walnut....	

Baltimore Stock Exchange.

Closing Prices for the Week Ending Oct. 3.
W.27.Th.28.F.29.Sat.30.M.2.Tu.3

Baltimore & Ohio.....	103 1/2
6s, 1885.....	
Central Ohio (\$50).....	108 1/2 108 1/2 108
1st mortgage.....	
2d mortgage, 7s.....	101 1/2
3d mortgage, 8s.....	
Northern Con. (\$50). 57	56 1/2 56 1/2 56 1/2 56 1/2 56
2d mort. 6s, 1885.....	105 1/2
3d mort. 6s, 1900.....	
6s, 1900, gold.....	116
6s, 1904, gold.....	
Pitts. & Connells. 7s.....	
Virginia 6s Consol.	59 1/2 59 1/2 58 1/2 58 1/2
Consol. coupons.....	
10-40 bonds.....	42 1/2 42 1/2 42 1/2 42 1/2
Def'd Certificates.....	
Western Maryland.....	16
1st M., end, by Balt.....	
2d M., do.....	
3d M., do.....	
1st M., unendorsed.....	
2d M., end, Wash Co.....	108 1/2
2d M., preferred.....	
City Passenger R. R.	43

London Stock Exchange.

Closing Prices

	Sept. 22.	Sept. 23.
Baltimore and Ohio ss, 1927.....	107	109 107 109
Central of N. J., \$100 shares.....	85	90 85 90
Do, consol. mort.....	100	111 109 111
Do, Income Bonds.....	88	92 92 96
Central Pacific of Cal., \$100 sha. 94	95	96 97
Do, 1st mort. 6s, 1885-98.....	117	119 117 119
Det., G'd Haven & Mil. Equip. bds. 115	117	113 115
Do. Con.M. sp.c., till '83, after 6.p.c. 113	115	113 115
Illinois Central \$100 shares.....	144	146 145 147
Do, S. F. ss, 1903.....	106	108 106 108
Lehigh Valley Cons. mort. 1923.....	115	119 115 119
Louisville and Nashville mort. 6s 97	99	97 99
Do, capital stock \$100 shares.....	73	75 75 77
N. Y. Cen. & Hud. R. mort. bonds. 132	136	132 136
Do, \$100 shares.....	138 1/2	139 1/2 139 1/2 140 1/2
Do, mort. bonds (stg.).....	121	123 121 123
N. Y. Lake Erie & West. \$100 sha. 42 1/2	43	44 1/2 44 1/2
Do, 6 p. c. pref. \$100 shares.....	87	89 88 90
Do, 1st Con. Mort. bonds (Erie). 127	130	124 127
Do, do. Funded Coupon bonds. 124	127	124 127
Do, 2d Consol. Mort. bonds.....	104	103 105
Do, do. Funded Coupon bonds. 98	100	96 98
N. Y. Pa. & Ohio 1st mort. bonds. 54	55	55 56
Do, Prior Lien bonds (sterling). 100	105	100 105
Pennsylvania \$50 shares.....	65 1/2	66 65 1/2 66
General Mortgage.....	121	123 122 124
Phil. & Erie Gen. mort. 6s, 1920-.....	119	117 119
Philadelphia & Reading \$50 shs. 32 1/2	32 1/2	32 1/2 33 33 1/2
General Consol. Mortgage.....	115	115 115
Do, Improvement Mortgage.....	115	117 115 117
Do, Gen. Mtg. '74, ex-dc'd coup. 97 1/2	98	97 1/2 98 1/2
St. L. Bridge 1st mort. gold bond. 122	124	122 124
Do, 1st. pref. stock.....	97	100 97 100
S. P'tie of Cal., 1st mort. 6s, 1905-6. 105	107	106 108
Union Pacific 1st mtg. 6s, 1896-9. 117	119	118 120
Wabash, St. L. & P. \$100 shares..	37	38 39 40
Do, \$100 pref. shares.....	60	70 71 1/2 72 1/2
Do, gen. mort. bonds.....	88	90 90 92

AMERICAN RAILROAD JOURNAL

Financial and Commercial Review.

THURSDAY EVENING, October 5, 1882.

DURING the morning hours call loans ranged from 6 to 8 per cent. In the afternoon the quotation was 7 per cent, but in the last hour fell to 4 per cent. The highest rate during the day was 8 per cent, the ruling quotation being 6@7 per cent.

The posted rates for prime bankers' sterling were 4 81@4.85 1/2%. The actual rates were 4.80 1/4@4.80 1/2% and 4.85 @4.85 1/2%, with cables 4.85 1/4@4.86 1/2%, and prime commercial bills 4.78 1/2@4.79 1/2%. The rates for Continental bills are as follows: Francs, 5.25@5.20%; marks 94 1/2@9 1/2%; and guilders 39 1/2@40.

The annual report of the Louisville and Nashville Railroad Company, which was presented at the annual meeting of the stockholders, held in Louisville, Ky., on the 4th inst., shows that the bonded debt of the company at the close of the fiscal year, June 30, 1882, amounted to \$58,117,778, and the capital stock to \$18,133,513. The gross earnings during the year were: from passengers, \$3,007,464.74; from freight, \$8,050,339.04; from mails and express, \$527,023.68; and from miscellaneous sources, \$402,917.09—total, \$11,987,744.55; from which deduct operating expenses, \$7,429,370.35, leaving net

earnings \$4,558,374.20; to which add \$266,442.35, realized from investments, making the total income \$4,824,816.55, from which deduct for interest, rental, taxes, etc., \$4,036,908.78; for deficit on Georgia Railroad lease, \$110,000; for dividend paid February 10, 1882, at 3 per cent, \$543,900—leaving the net surplus for the year, \$135,007.77. The number of miles operated by the company is 3,233. A resolution was adopted increasing the capital stock to \$30,000,000, such increase amounting to \$11,866,487. An election for directors was held, which resulted in the choice of the following gentlemen: C. C. Baldwin, G. C. Clark, C. H. Clark, F. D. Carley, T. W. Evans, E. H. Green, John E. Green, J. S. Rogers, G. A. Washington, J. T. Woodward, John M. Brookman, W. C. Hall and W. S. Williams. C. C. Baldwin was re-elected president, and M. H. Smith first vice president. Second Vice President Hington and Secretary Ranney were also re-elected.

The report of the Charlotte, Columbia and Augusta Railroad, which is now operated by the Richmond and Danville combination, shows a total income for the year ending June 30, 1882, of \$590,935.17; the total expenses, including taxes for the same period, were \$464,166.72, leaving as net income \$126,768.45. During the year \$55,767.63 was spent in the equipment and construction of the road, making the total cost of equipment and construction \$5,188,583.98, equal to \$27,217.71 per mile. The total debt of the road is \$2,795,155.04, of which \$2,500,000 is funded, and \$289,155.04 unfunded. During the year the total earnings of the passenger department amounted to \$206,757.55, and the total earnings of the freight department to \$376,894.19. The taxes paid by the company were \$29,250.87. The road has 191 1/2 miles of track, 55 miles of which have been laid with steel rails. Twelve miles of steel rails were laid during the past year, and the road is in a steadily improving condition. This road runs from Charlotte, N. C., by way of Columbia, S. C., to Augusta, Ga., and is a most important link in the Richmond and Danville system.

The directors of the recently reorganized Indianapolis and St. Louis Railroad Company have decided to issue \$2,000,000 of new mortgage bonds with which to realize funds to put the road and equipments into first-class condition; and the stockholders have confirmed the action of the directors in this particular.

The annual report of the Columbia and Greenville Railroad Company, made to the State Railroad Commissioner, shows that the total income for the year ended June 30, 1882, was \$608,594.02, and the total expenses (including taxes) \$434,663.54, leaving as net income \$173,990.48. During the year \$45,687.81 was expended on the construction and equipment of the road, making the total cost of equipment and construction at the close of the year \$5,045,687.81, or \$25,717.06 per mile. The total debt of the company's 's \$3,323,279.65, of which \$2,000,000 is funded in 6 per cent interest bearing first mortgage bonds, and \$1,000,000 in 6 per cent interest-bearing second mortgage bonds. The unfunded debt amounts to \$323,279.65. The capital stock paid in per mile is \$10,193.68, and the total debt per mile is \$16,938.22. The earnings of the passenger department amounted to \$130,997.66, and the earnings of the freight department to \$459,874.13. The income per mile of road amounted to \$3,101.91, and the expense per mile of road to \$2,219.11. The main line of this road and its branches are 166 miles in length. The Spartanburg, Union and Columbia Railroad and the Laurens Railway are operated by the Columbia and Greenville Railroad Company. The Spartanburg Railroad is 68 miles in length. During the year its income from all sources amounted to \$1,000,105.72, and its expenses to \$81,801.76. The Laurens Railway is 29 miles in length. Its total income for the year amounted to \$33,108.25, and its expenses to \$33,049.45. The Columbia and Greenville Railroad belongs to the Richmond and Danville combination, and is operated in its interests.

The earnings of the Chesapeake and Ohio Railway for the month of August, 1882, were \$381,454.42, the expenses \$208,609.76, and the net earnings, \$172,944.66. The officers of the company call attention to the fact that if the earnings were to continue at this rate they would be sufficient to pay full cash interest upon the entire bonded debt, including the currency bonds, on which it is permitted to pay interest in second preferred stock. They assert that it is the policy of the company to pay the interest on these bonds in cash as soon as the earnings will admit of it.

The following quotations of sales of railway and other securities, for the week, are in addition to those given elsewhere in our columns.

New York.—Allegheny Central, 27 1/2%; Atchison, Colorado and Pacific 1st, 94; Boston and New York Air Line pref., 79; Chicago, St. Paul, Minneapolis and Omaha, 51 1/2%; do, pref., 108 1/2%; do, consol., 107 1/2%; Central Iowa, 33 1/2%; Cedar Falls and Minn., 19; Columbia and Greenville pref., 65; Chicago, Milwaukee and St. Paul, Southern Minn. div. 1st, 107 1/2%; do, Chicago and Pacific West div. 1st, 93; Chicago, Burlington and Quincy 5s, S. F., 102 1/2%; do, Iowa div. 4s, 84 1/2%; Cairo and Fulton 1st, 106 1/2%; Chesapeake and Ohio cur. 6s, 52; Dubuque and Sioux City, 88; Denver and Rio Grande, 56 1/2%; do, 1st, 115 1/2%; Denver South Park and Pacific 1st, 102 1/2%; East Tennessee, Va. and Ga., 10; do, inc., 40%; do, 5s, 71 1/2%; Evansville and Terre Haute, 80; do, 1st, 96 1/2%; Fort Worth and Denver 1st, 97 1/2%; Green Bay, Winona and St. Paul, 10; Georgia R. R., 151; Gulf, Colorado and Santa Fe 1st, 107 1/2%; International and Gt. Northern coup. 6s, 81 1/2%; do, 1st, 105 1/2%; Indiana, Bloomington and Western, 45; Eastern div. 6s, 94 1/2%; Kansas Pacific 1st consol., 103 1/2%; do, 6s Denver div. ass., 100; Keokuk and Des Moines 1st, 100 1/2%; Louisville and Nashville, genl. mort. 6s, 86; Little Miami 1st, 101; Louisville, New Albany and Chicago, 70; do, 1st, 103; Long Island, 62; do, consol. 5s, 97 1/2%; do, 1st, 121; Lake Erie and Western, 37 1/2%; do, inc., 54; Milwaukee, Lake Shore and Western pref., 55; do, 1st, 101; Minneapolis and St. Louis, 33; do, pref., 73 1/2%; Mobile and Ohio, 21 1/2%; do, 1st debent., 109 1/2%; Missouri, Kansas and Texas, 37; do, genl. mort. 6s, 86 1/2%; do, consol., 106 1/2%; Missouri Pacific, 107 1/2%; do, 1st consol., 101 1/2%; Manhattan Beach, 17; Memphis and Charleston, 52 1/2%; Michigan Central, 58 1/2%; Metropolitan Elevated Railway 2d, 90; New York, Chicago and St. Louis, 15; do, pref., 31 1/2%; do, 1st, 90 1/2%; Nashville, Chattanooga and St. Louis, 53; New York, Ontario and Western, 27; Norfolk and Western pref., 57 1/2%; do, gen'l mort., 102 1/2%; New Orleans Pacific 1st, 91 1/2%; Northern Pacific 1st, 103 1/2%; Ohio and Mississippi, Springfield div. 1st, 121; Ohio Central, 17 1/2%; do, 1st, 108 1/2%; Oregon Railway and Nav., 152; do, 1st, 108 1/2%; Oregon Trans-Continental, 91 1/2%; Ohio Southern, 17; do, inc., 30; Oregon Short Line 6s, 100 1/2%; Peoria, Decatur and Evansville, 33 1/2%; Richmond and Alleghany, 19 1/2%; Rochester and Pittsburgh, 23 1/2%; do, 1st, 105; Richmond and Danville, 107 1/2%; do, debent., 70 1/2%; do, 1st, 99; Richmond, Danville and West Point, 55 1/2%; Rome, Watertown and Ogdensburg extended 5s, 73; St. Paul and Duluth, 35; do, pref., 93; St. Paul, Minn. and Man., 158; do, 1st, 110 1/2%; do, Dakota ext. 1st, 108; St. Louis, Iron Mt. and Southern, Arkansas Branch 1st, 106 1/2%; do, 5s 77 1/2%; St. Paul and Sioux City 1st, 109; Southern Pacific of Cal. 1st, ex-int., 103; St. Louis and San Francisco 2d Class B, 90 1/2%; do, C, 90 1/2%; St. Louis, Kansas City and Northern, Omaha div. 1st, 108 1/2%; Texas and Pacific, 45 1/2%; do, inc. L. G., 62 1/2%; do, Rio Grande div. 1st, 82 1/2%; Utah Southern Gen'l mort. 7s, 104 1/2%; Union Pacific col. trust, 106 1/2%; Wabash, St. Louis and Pacific gen'l mort. 6s, 85 1/2%; do, Iowa div. 1st, 90; do, Dubuque div. 1st, 83; Winona and St. Peter 1st, 106 1/2%; Arkansas 7s, M., O. & R. R., 30; Louisiana consols., 70; North Carolina S. T. 3d class, 6 1/2%; do, consol. 4s, 78; South Carolina 6s, non fund., 6%; Tennessee 6s, 50; do, Compromise bonds, 60; American Cable, 72; Mutual Union Telegraph, 25 1/2%; do, 6s, 76; Colorado Coal and Iron, 42; Cameron Coal, 18; Maryland Coal, 18; New Central Coal, 18; Home-stake Mining, 18; Ontario, 38 1/2%; Standard, 5.

Boston.—Atlantic and Pacific blocks, 105; do, 6s, 96; do, inc., 24 1/2%; Boston Land, 7 1/2%; Boston Water Power, 3 1/2%; Boston, Clinton, Fitchburgh and New Bedford, 57; Central of Iowa, 33 1/2%; Cincinnati, Sandusky and Cleve land 7s, 104 1/2%; Chicago, Milwaukee and St. Paul, Dayton div. 6s, 103 1/2%; Chicago, Burlington and Quincy 5s, 1019, 105; do, Denver exten. 4s, 83 1/2%; Connotton Valley, 7 1/2%; do, pref., 11 1/2%; do, 6s, 64; do, 5s, 50; Flint and Pere Marquette, 20 1/2%; do, pref., 95; Iowa Falls and Sioux City, 88; Kansas City, St. Joseph and Council Bluffs 7s, 114; Kansas City, Fort Scott and Gulf, 7s, 112; Little Rock and Ft. Smith, 53; do, 7s, 107 1/2%; Marquette, Houghton and Ontonagon, 60; do, 6s, 101; Mexican Central, 23 1/2%; do, 7s, 78 1/2%; Massachusetts Central, 5 1/2%; do, 6s, 96; Maine Central, 85; Republican Valley 6s, 102 1/2%; New York and New England 6s, 105 1/2%; New Mexico and Southern Pacific 7s, 114; Oregon Short Line 6s, 99 1/2%; Rutland pref., 22; do, 5s, 70; do, 6s, 99; Sonora 7s, 104 1/2%; Summit Branch, 11; Southern Kansas and Western 7s, 110; Toledo, Delphos and Burlington

Branch inc., 18; Toledo, Cincinnati and St. Louis, 7%; do. 6s, 63; do. Southeast div. 6s, 63; Wisconsin Central, 18%; Allouez Mining Co., 18%; Atlantic, 16%; Brunswick Antimony, 10; Franklin, 16%; Harshaw, 14%; Huron, 3%; Osceola, 35; Pewabic, 14; Sullivan, 2; Silver Islet, 14.

Philadelphia.—Am. S. S. Co. 6s, 105%; Cincinnati 7-30s, 131%; Central Transp., 34%; Huntingdon and Broad Top Mt. consol. mort. 5s, 93; Northern Pacific pref. scrip, 94%@95%; Norfolk and Western pref., 57%; Philadelphia, Wilmington and Baltimore 4s, 95; Philadelphia and Reading debent. 6s, 61; do. pref., 31%; Pittsburgh Av. 7s, 1885, 105; Philadelphia City 4s, 1903, 113%; do. 6s, 1890, 120; Pennsylvania and New York Canal 7s, 1896, 122%; Pennsylvania Co. 4%8s, 95; Steubenville and Indiana 6s, A. & O., 105%; Texas and Pacific consol. mort. 6s, 92%; Warren and Franklin 7s, 112; West Jersey and Atlantic, 31. The latest quotations are: City 6s, 108@120; do. free of tax, 127@132; do. 4s, new, 108@114; Pennsylvania State 5s, new loan, 117%@118; do. 4s, old, 108@114; do. 4s, new, 116@117; Philadelphia and Reading Railroad, 31%@31%; do. consol. mort. 7s, reg., 126@127; do. gen'l mort. 6s, coupon 94%@95%; do. 7s, 1893, 121@—; do. new conv., 75@76; United New Jersey R. and Canal, 190@190%; Buffalo, Pittsburg and Western' 21%@21%; Pittsburgh, Titusville and Buffalo 7s, 94@95; Camden and Amboy mort. 6s, 1889, 114@115; Pennsylvania R. R., 63%@63%; do. general mort. 6s, coupon, 125@125%; do. reg., 121@—; do. consol. mort. 6s, reg., 120%@121%; Little Schuylkill R. R., 58@—; Schuylkill Navigation pref., 13@15; do. 6s, 1882, 90@91; Elmira and Williamsport pref., 58@59; do. 5s, 100@101; Lehigh Coal and Navigation, 43%@43%; do. 6s, 1884, 102%@103%; do. R. R. loan, 114@115; do. Gold Loan, 112@113%; do. consol. 7s, 117@118; Northern Pacific, 49%@49%; do. pref., 95%@95%; North Pennsylvania, 64@65; do. 6s, 106@107; do. 7s, 122@123; do. 7s, General mort. reg., 124@125; Philadelphia and Erie, 22@22%; do. 7s, 114@114%; do. 5s, 102@103; Minehill, 62@62%; Catawissa 22@23; do. pref., 55%@—; do. new pref., 54@54%; do. 7s, 1900, 117@120; Lehigh Valley, 66%@66%; do. 6s, coupon, 122@123; do. reg., 122@123; do. 7s, 133@135; do. consol. mort., 121@122; Fifth and Sixth streets (horse), 170@—; Second and Third, 114@115; Thirteenth and Fifteenth, 70@75; Spruce and Pine, 42@44; Green and Coates, 85@90; Chestnut and Walnut, 90@93; Germantown, 70@75; Union, 110@111; West Philadelphia, 112@120; People's, 16@17; Continental, 103@105.

Baltimore.—Atlantic Coal, 1.10; Atlanta and Charlotte 1st, 107%; Baltimore City 6s, 1900, 127; do. 6s, 1890, 115; do. 6s, 1886, 108; do. 6s, 1893, exempt, 116; do. 6s, 1902, 124; do. 6s, 1886, new, 105%; do. 5s, 1916, 125; Columbia and Greenville 1st, 100%; Canton Co., 60; do. 6s, 104; Cincinnati 7-30s, J. & J., 131; Charlotte, Columbia and Augusta, 53; George's Creek Coal, 95%; Maryland Defense 6s, 106; Marietta and Cincinnati 1st Trust certificates, 127; do. 2d do., 98%; do. 3d do., 56; Northern Central 5s, series A, 97%; North Carolina consol. 4s, 78%; Ohio and Mississippi, Springfield div. 1st, 120%@120%; Virginia and Tennessee 8s, 123; do. 6s, 101%; Virginia Midland pref., 100; do. 2d mort., 107; do. 5th mort., 93%; Virginia 10-40 coupons, 66; do. Peeler coupons, 39. The latest quotations are: Baltimore and Ohio, 194%@—; do. 6s, 1885, 103%@104; Baltimore City 6s, 1890, 114%@115; do. 5s, 1900, 117%; do. 5s, 1916, —@125%; do. 5s, 1894, 114@114%; Canton Co. 6s, 103%@—; Columbia and Greenville 1st, 100%@100%; Marietta and Cincinnati 1st, 127@127%; do. 2d, 98%@99; do. 3d, 56@56%; Northern Central, 55%@56%; do. 6s, 1900, 115%@116%; do. 1900; gold, —@116; do. 5s, Series A, 97%@97%; Ohio and Mississippi, Springfield div. 1st, 120%@120%; Virginia consols, 57%@58%; do. 10-40s, 42%@42%; Virginia Midland ad mort., 106%@107%; do. 5th mort., 93%@—; do. inc., 64@71.

How very fortunate it is that every one is able to believe that he has more than his share of brains.

A YOUNG man in a train making fun of a young lady's hat to an elderly gentleman in the seat with him. "Yes," said his seat mate, "that's my wife, and I told her if she wore that bonnet some fool would make fun of it."—*Hawkeye.*

The Coal Trade.

THE leading coal-carrying companies make the following reports of their tonnage for the week ending Sept. 23, and for the year to that date, compared with their respective amounts carried to the same time last year:—

	Week.	1882.	1881.
Reading Railroad	203,667	6,457,662	6,292,886
Schuylkill Canal	20,197	348,399	430,138
Lehigh Valley	137,624	4,921,147	4,538,700
Delaware, Lackawanna and Western	116,034	3,203,752	3,036,913
Shamokin	25,626	816,558	780,994
Central R. R. of New Jersey	3,000	743	3,031,252
United R. R. of New Jersey	40,851	1,214,618	1,129,385
Pennsylvania Coal	38,243	985,197	979,067
Delaware and Hudson Canal	91,896	2,459,359	2,569,525
Huntingdon and Broad Top Mountain	15,583	325,828	383,243
Penn. and New York	1,119,061	1,154,252	
Clearfield, Pa.	54,468	2,083,425	1,743,654

The total tonnage of anthracite coal from all the regions for the week ending Sept. 23, as reported by the several carrying companies, amounted to 704,705 tons, against 611,487 tons in the corresponding week last year, an increase of 93,218 tons. The total amount of anthracite mined for the year is 20,108,879 tons, against 19,684,826 tons for the same period last year, an increase of 514,043 tons. The quantity of bituminous coal sent to market for the week amounted to 103,026 tons, against 94,105 tons in the corresponding week last year, an increase of 8,921 tons. The total amount of bituminous mined for the year is 3,080,983 tons, against 3,532,518 tons for the corresponding period last year, a decree of 451,535 tons. The total tonnage of all kinds of coal for the week is 807,731 tons, against 705,592 tons in corresponding week last year, an increase of 102,139 tons, and the total tonnage for the coal year is 23,279,862 tons, against 23,217,344 tons to same date last year, a decrease of 62,518 tons. The quantity of coal and coke carried over the Pennsylvania Railroad for the week ending Sept. 23, was 224,779 tons, of which 178,980 tons were coal and 44,794 tons coke. The total tonnage for the year thus far has been 7,974,956 tons, of which 5,903,524 tons were coal and 2,071,432 tons coke. These figures embrace all the coal and coke carried over the road, east and west. The shipments of bituminous coal from the mines of the Cumberland coal region for the week ended Sept. 23 were 53,298 tons, and for the year to that date 820,595 tons, a decrease of 663,333 tons as compared with the corresponding period of last year. The shipments were: To the Baltimore and Ohio Railroad—for the week, 27,198 tons; year, 612,243 tons; decrease as compared with 1881, 358,141 tons. Chesapeake and Ohio Canal—Week, 16,463 tons; year, 93,358 tons; decrease as compared with 1881, 236,617 tons. Pennsylvania Railroad—Week, 9,637 tons; year, 110,200 tons; decrease from last year, 32,572 tons. The Reading Railroad shipment for last week, ending September 30, was about 212,000 tons, of which 62,100 tons were sent to and 53,000 tons shipped from Port Richmond, and 13,500 tons sent to and 13,000 tons shipped from Elizabethport.—*Philadelphia Ledger*, Oct. 2.

Progress of Railroad Tickets.

PREVIOUS to 1855 a simple, plain cardboard ticket was all that was in use on American railroads, and these were used over and over again, the conductors passing them back to the ticket seller after a trip, and only lost their usefulness with their shape and consistency. Those were palmy days for conductors, especially if they happened to be unscrupulous and inclined to regulate their own salaries, as too often they did, being human and infernally tempted. Compared with them, the present conductor is bound with chains. But already at the period alluded to above a better system had obtained upon English railroads, and in 1855 the Boston and Worcester Railroad introduced numbered local tickets to American use. Previous to that time railroad tickets were not an American production, either in their stock or their printing; but now it became necessary to make them articles of home manufacture. We may be very

sure that the presence of demand proved marvellously stimulating to the Yankee desire to supply, and it was not long before Yankee printers were prepared to turn out everything required of them, and were in turn found leading the railroads in the way they should go with respect to their ticket forms and devices, as they have done in some respects ever since. In 1864 the system of coupon numbered tickets was first proposed by the Baltimore and Ohio management, and great was the ridicule and contempt poured upon the suggestion by the remaining lines in the country. Not even the introduction of the umbrella was received with greater popular disfavor than was this innovation by the American railroads. It is hardly necessary to state, however, that the proposition, carried into immediate effect, became at once successful, and that they who laughed the loudest and scorned the fiercest were the first to adopt in imitation. It is now eighteen years since that episode took place; and, should consecutively numbered coupon railroad tickets now be suddenly withdrawn from business, or in some way their manufacture become impossible, either event alone would be sufficient to almost paralyze travel upon railroads.—*Boston Herald*.

THE terminal facilities of the New York, Chicago and St. Louis Railway at Chicago have been finally arranged for on the land recently voted by the city to the Baltimore and Ohio for depot purposes. The two roads, it is understood, will occupy this site, which is a very central one, jointly.

THE Squire had a yoke of fine oxen, and one day told Mike, who was working them, to "bait" them and then come to dinner. Dinner was about half finished when Mike entered, his face betraying unusual exertion. The Squire didn't notice this, but happened to think of the oxen. "Mike," said he, "did you bait the oxen?" "Dade," replied he, "an' I bait one of them till he lay down, he did; an' I just thought I'd be after gettin' me dinner, an' I would go out an' bait the other one!"

THE LAKE SHORE AND MICHIGAN SOUTHERN RAILWAY COMPANY.

TREASURER'S OFFICE, GRAND CENTRAL DEPOT, NEW YORK, Sept. 27, 1882.

The Board of Directors of this company have this day declared a QUARTERLY DIVIDEND OF TWO PER CENT upon its Capital Stock, payable on WEDNESDAY, the first day of NOVEMBER next, at this office. The TRANSFER-books will be closed at 3 o'clock P. M., on MONDAY, the 2d day of October next, and will be reopened on the morning of Monday, the sixth day of November next.

E. D. WORCESTER,
Treasurer.

To Contractors.

OFFICE OF THE GEORGETOWN AND LANES RAILROAD COMPANY,
GEORGETOWN, S. C., Sept. 22, 1882.

PROPOSALS ARE INVITED UNTIL OCTOBER 31, prox., for the construction of the road-bed of the GEORGETOWN AND LANES RAILROAD, as covered by survey and estimate of Major G. W. EARLE, Engineer. For specifications and all other information address the undersigned. The Company reserves the right to reject any or all bids.

P. R. LACHICOTTE,
President G. & L. R. R. Co.

**GORDON & DUGGAN
RAILWAY SWITCH.**

The Standard on several and in use on twenty-five Railroads.

Combines Safety, Durability, Simplicity, and Low Cost, with Fixed Rails.

The only movable piece weighs 375 lbs., and is without a bolt or rivet.

**E. GORDON, Treasurer,
No. 28 STATE STREET, BOSTON, MASS.**

FOR SALE.

Locomotives—Four Second-hand Narrow-Gauge Engines in good order.

One Second-hand "Tank" Narrow-Gauge Engine, 10 tons. Several Second-hand Standard-Gauge Locomotives in good order, immediate delivery.

One new 3ft. Gauge Passenger Engine, 22 tons, prompt delivery.

Six new 4ft. 8½ Gauge Locomotives, cylinders 17x24, weight 35 tons. October and November delivery.

Two new 3ft. Gauge Locomotives, Cylinders 12x18, weight 20 tons. October and November delivery.

Cars—Passenger and Freight Cars of all descriptions for early delivery.

Rails—16lb., 20lb. 30lb. 35lb. and 56lb. Rails.

Car Wheels and Axles.

Narrow-Gauge Rolling-stock a specialty.

**BARROWS & CO.,
64 Broadway,
NEW YORK.**

McCANN'S

EXCELSIOR SELF CAR COUPLING.

Patented August 3, 1880.

For Durability, Simplicity, and Practicability

IT HAS NO EQUAL.

**MARION W. McCANN,
Patentee and Proprietor,
DUBLIN, IND.**

**Continuous
Automatic
FREIGHT BRAKES.**

**Requiring no other Connection
between Cars than the or-
dinary Coupling-Link
and Pin.**

SIMPLE, DURABLE, AND EFFICIENT.

Brakes can be applied to every Car in the longest train, from the engine or caboose, or from any car in the train. It can be readily attached to any car, and adapted to ordinary brake beams, shoes, etc. There is no possibility of damaging wheels by "sliding."

PATENTED MAY 23, 1882.

All Railroad and manufacturing companies, or parties able to co-operate with patentee in their manufacture and introduction, are invited to correspond with

**WM. C. SCHULTZE,
Surgeon C. R. I. and P. Ry.
MARENGO, Iowa Co., Iowa.**

**NO OTHER LINE IS SUPERIOR TO THE
FITCHBURG RAILROAD**

**HOOSAC TUNNEL ROUTE
WEST.**

6.30 A. M. ACCOMMODATION.

Connecting at Syracuse, N. Y., at 7.15 P.M., with through sleeping cars for Cincinnati, Cleveland, Toledo, **DETROIT AND CHICAGO.**

**3.00 P. M. CINCINNATI
EXPRESS.**

Pullman Sleeping Car attached, running through to Cincinnati without change. (Only Line running Pullman Cars from Boston.) This car runs via Erie Railway and N.Y., P. & O. R.R., making direct connection for Louisville, St. Louis, Kansas City, New Orleans, and all points in Texas and New Mexico.

**3.00 P. ST. LOUIS
EXPRESS.**

THE ONLY LINE which runs a THROUGH SLEEPING-CAR from

BOSTON TO ST. LOUIS WITHOUT CHANGE!

ARRIVING AT 8.00 A.M. SECOND MORNING.

Through sleeping car for Buffalo, Toledo, Fort Wayne, Logansport, Lafayette, Danville, Tolono, Decatur and St. Louis, making direct connection with through Express Trains for Kansas, Colorado, Texas, and all points in the

SOUTHWEST.

**6.00 P. PACIFIC
EXPRESS.**

The only line running a through sleeping car via Buffalo and Detroit without change, arriving at Chicago at 8.00 A.M. second morning, making sure connections with through Express Trains for Iowa, Nebraska, Kansas, Colorado, the Pacific Coast, Wisconsin, Minnesota and all points in the

WEST AND NORTHWEST.

THE ABOVE TRAINS RUN DAILY, SUNDAYS EXCEPTED.

This Great Short Line passes through the most celebrated scenery in the country, including the famous HOOSAC TUNNEL, four and three-quarters miles long, being the longest Tunnel in America, and the third longest in the world.

Tickets, Drawing-Room and Sleeping-Car Accommodations may be secured in Advance by Applying to or Addressing

250 WASHINGTON STREET, BOSTON. 250

JOHN ADAMS, General Superintendent. F. O. HEALD, Acting Gen'l Passenger and Ticket Agent.

In effect January 9th, 1882, and subject to changes.

RAILROAD AND CANAL DIVIDEND STATEMENT.

Showing the amount of Stock Outstanding, the Dividend Periods and the date of last Dividend.

Marked thus(*) are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.	Marked thus(*) are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.	Marked thus(*) are leased roads.	Stock outstanding.	Divide'd Periods.	Last Dividend Payable.
Albany and Susq*. 100	2,500,000	semi-an	July '82 2	Little Miami. 50	4,637,300	q'arterly	Sept. '82 2	Ware River*. 100	750,000	semi-an	July '82 3 1/2
Ashuelot. 100	210,000	q'arterly	Oct. '81 3 1/2	Little Rock & Ft. S. 100	4,066,135	q'arterly	July '81 1C	Warren (N. J.). 100	1,800,000	semi-an	Apl. '82 2 1/2
Ateh. Top. & S. F. 100	54,000,000	q'arterly	Nov. '82 1 1/2	Little Schuylkill*. 50	2,646,100	semi-en	July '82 3 1/2	Warwick Valley. 100	240,000	semi-an	July '82 2 1/2
Atlanta and W. Point. 100	1,232,200	semi-an	Jan. '82 6	Louisville & Nashv. 100	19,130,913	semi-en	Feb. '82 3	Westchest & Phil. prefcc	221,300	semi-an	July '82 2
Atlantic and St. Law*. 100	5,840,000	semi-an	Mar. '82 3	Lowell & Andover. 100	500,000	semi-en	Jan. '82 3 1/2	West Jersey. 100	1,259,750	semi-an	Sept. '82 3
Augusta and Savan*. 100	1,042,000	semi-an	June '81 3 1/2	Lykens Valley. 100	600,000	q'arterly	Oct. '81 2 1/2	Wilmington & Newb. 100	1,456,200	semi-an	July '82 3
Avon, Genesee & Mt*. 100	225,000	semi-an	July '81 3	Manchester & Law. 100	1,000,000	semi-an	May '82 5	Wil. Col. & Aug. 100	960,000	semi-an	July '82 3
Baltimore and Ohio. 100	14,792,566	semi-an	May '82 5	Manhattan. 100	12,000,000	semi-an	Oct. '82 1 1/2	Winchester & Potow. 100	180,000	semi-an	July '82 3
" pref. 100	5,000,000	semi-an	July '82 3	" 1st pref. 100	6,500,000	q'arterly	Oct. '82 1 1/2	Winchester & Stanb. 100	74,700	semi-an	July '82 3
Washington Br. 100	1,650,000	semi-an	Apr. '82 5	" 2d pref. 100	6,500,000	q'arterly	Oct. '82 1 1/2	Worcester & Nashua. 75	1,789,800	semi-an	July '82 1 1/2
Berkshire*. 100	600,000	q'arterly	Apr. '82 1 1/2	Marietta & Cincinnati. 100	1,386,350	semi-an	May '82 5	HORSE-POWER R. R.			
Boston and Albany. 100	20,000,000	q'arterly	Sept. '82 2	" 1st pref. 50	8,105,600	semi-an	Sep. '81 38	Albany City. 100	200,000	annual	.... '80 5 1/2
Bos. & N.Y. AirLine pf. 100	2,795,227	q'arterly	June '82 1	" 2d pref. 50	4,440,000	semi-an	Sep. '81 38	Baltimore City. 25	1,000,000	semi-an	Oct. '82 3
Bos. Cl. F. & N.B. pref. 100	1,750,100	semi-an	Oct. '82 3 1/2	Marq. Hout. & Ont. pf. 100	2,259,026	q'arterly	Aug. '82 4	Balt. Cat. & El. Mills. 100	.....	semi-an	July '82 2
Bos. Conc. & Mont. pf. 100	800,000	semi-an	May '82 3	Massawippi*. 100	400,000	semi-an	Aug. '82 3	Bleecker St. & Ful. F. 100	900,000	semi-an	July '82 2 1/2
Boston and Lowell. 500	3,940,000	semi-an	July '82 2	Metropolitan. 100	6,500,000	q'arterly	Oct. '82 1 1/2	Boston & Chelsea pref. 50	110,000	semi-an	Get. '82 3
Boston and Maine. 100	6,921,274	semi-an	May '82 4	Michigan Central. 100	18,738,204	q'arterly	Aug. '81 1	Broadway (Brooklyn) 100	250,000	q'arterly	Oct. '82 6
Boston & Providence. 100	4,000,000	semi-an	May '82 4	Middlesex Central. 100	280,000	semi-an	Aug. '82 3	B'way & 7th Av. (N.Y.) 100	2,100,000	q'arterly	Oct. '82 2
Attleborough Br. 100	131,700	semi-an	July '82 3 1/2	Mill Creek & Minehill. 50	323,000	semi-an	July '82 5	B'klyn & Hunter's Pt. 100	400,000	semi-an	Oct. '82 6
Bos. Revere B & Lynn. 100	419,400	semi-an	July '82 3 1/2	M. Hill & Schuyl. Hav*. 50	4,022,500	semi-an	July '82 3 1/2	Brooklyn City. 100	2,000,000	q'arterly	Ang. '82 3 1/2
Buffalo, N. Y. & Erie*. 100	950,000	semi-an	June '82 3	Missouri Pacific. 100	28,169,800	q'arterly	Oct. '82 1 1/2	Bushwick (Brooklyn) 100	300,000	semi-an	Oct. '82 6
Camden & Atlantic. 50	377,400	q'arterly	Nov. '82 3	Mobile & Montgomery. 100	3,022,517	semi-an	Feb. '82 2 1/2	Cambridge. 100	68,000	q'arterly	Oct. '82 6
" pref. 50	880,650	semi-an	Nov. '82 4	Morris & Essex. 100	15,000,000	semi-an	July '82 3 1/2	Cen. Park. N. & E. Riv. 100	1,800,000	q'arterly	Oct. '82 6
Central & Burl. Co. 100	381,925	semi-an	July '82 3	Mt Carbon & P. Carbon. 50	282,350	semi-an	July '82 6	Christoph'r & Tenth St. 100	192,500	q'arterly	Jan. '82 2 1/2
Camden & South. 100	15,000,000	semi-an	Feb. '82 3	Nashua and Lowell. 100	8,105,800	semi-an	Oct. '82 1 1/2	Citizens' (Phil). 50	200,000	annual	.... '80 14 1/2
Central May & Millville*. 50	447,000	semi-an	June '82 3	Nashv. & Decatur. 100	1,827,000	semi-an	June '81 3	Coney Island & Pklyn. 50	500,000	semi-an	Oct. '82 5
Catawissa*. 50	1,159,500	annual	Oct. '81 1 1/2	Nashv., Chat. & St. Louis. 25	6,670,325	semi-an	Apl. '82 1 1/2	Continental (Phil). 50	580,000	q'arterly	July '82 6
" new pref. 50	2,200,000	semi-an	May '82 3 1/2	Naugatuck. 100	2,000,000	semi-an	July '82 5	D. Dock. E. Bay & Batw. 100	1,200,000	q'arterly	Oct. '81 4
Cayuga and Susq*. 50	580,110	semi-an	July '82 4 1/2	Nequehoning Val'y*. 50	600,000	semi-an	Sept. '82 3	Eighth Av. (N. Y.). 100	1,000,000	q'arterly	Oct. '81 3
Cedar Rapids & Mo. R. 100	6,850,400	q'arterly	Aug. '82 1 1/2	N. Castle & Beaver Val'y*. 50	600,000	q'arterly	Oct. '81 1	42d St. & G. St. Ferry. 50	747,000	semi-an	Nov. '81 6
Central of Georgia. 100	7,500,000	semi-an	June '82 4	New London North'n* 100	1,300,000	q'arterly	July '82 1 1/2	Frankl. & Southw. (Ph). 50	600,000	q'arterly	Oct. '82 2 1/2
Central of New Jersey. 100	18,563,200	q'arterly	July '82 2 1/2	N. Y. Cen. & Hud. 100	89,428,300	q'arterly	Oct. '82 2	Germann, Town. (Ph.). 50	572,800	q'arterly	Oct. '82 2 1/2
Central Ohio*. 50	2,437,950	semi-an	July '82 3	N. Y. and Harlem. 100	7,950,000	q'arterly	July '82 4	Grand St. & Newton. 100	150,000	q'arterly	July '82 3
" pref. 50	411,550	semi-an	July '82 3	" pref. 100	1,500,000	annual	Apl. '82 3	Henton, Mantua & F. M. 50	299,380	semi-an	Jan. '82 4
Central Pacific. 100	59,275,500	semi-an	Aug. '82 3	City Line. 100	.....	.....	.....	Highland. 100	600,000	semi-an	July '82 4
Chemung*. 100	380,000	q'arterly	July '81 1 1/2	N.Y., Lake Erie & West. 100	77,083,000	.....	.....	Lomb. & Southw. (St. Ibh). 25	195,000	semi-an	Oct. '82 4
Cheshire preferred. 100	2,155,300	semi-an	July '82 1 1/2	" pref. 100	8,156,825	.....	.....	Lynn and Boston. 100	200,000	semi-an	July '82 4
Chicago and Alton. 100	11,181,741	semi-an	Sept. '82 4	N. Y., N. H. & Hart. 100	15,500,000	semi-an	Jan. '82 5	Malden and Melrose. 100	165,000	semi-an	May '82 3 1/2
" pref. 100	2,245,000	semi-an	Sept. '82 4	N. Y. Prov. & Boston. 100	3,000,000	q'arterly	Aug. '82 2	Middies (Boston). 100	650,000	semi-an	Oct. '82 7
Chi. Burl. & Quincy. 100	55,337,455	q'arterly	Sept. '82 2	Niag. Bridg. & Canand. 100	1,000,000	semi-an	July '81 3	N.Y. Bay Ridge & Jamico. 100	150,000	semi-an	May '82 3
Chi. Iowa & Nebras*. 100	3,916,200	semi-an	July '82 4	North Carolina. 100	3,000,000	semi-an	Sep. '81 3	Ninth Av. (N. Y.). 100	797,320	.....	.....
Chi. Mil. & St. Paul. 100	20,404,060	semi-an	Oct. '82 3 1/2	" pref. 100	86,000	semi-an	May '81 4	Orange & Newark. 100	282,555	.....	.....
Chi. N. Western. 100	14,401,183	semi-an	June '82 3 1/2	N. Eastern (S.C.) prefcc	1,320,400	q'arterly	Aug. '82 1 1/2	People's (Phila). pref. 25	124,744	.....	July '82 2
" pref. 100	14,401,257	semi-an	July '82 3	Norfolk & Western prefcc	15,000,000	semi-an	Jan. '82 5	Philadelphia City. 100	475,000	semi-an	July '82 4
Chi. R. I. & Pacific. 100	41,600,000	q'arterly	Nov. '82 1 1/2	North Pennsylvani. 50	4,527,150	semi-an	July '82 3	Phila. and Darby. 20	200,000	semi-an	July '82 3 1/2
Chi. and West Mich. 100	6,151,000	semi-an	Feb. '82 2 1/2	Northern N. Hampshire. 50	6,122,000	semi-an	July '82 3	Phila. & Grey's Ferry. 50	308,000	semi-an	Jan. '82 6
Chi. St. P. M. & O. pref. 100	10,390,000	q'arterly	Oct. '82 1 1/2	Northern N. Jersey*. 100	1,000,000	semi-an	July '82 2 1/2	Phl. Alleg. & Manches. 50	300,000	q'arterly	Oct. '81 3
C. Ind., St. L. & Chi. 100	6,000,000	q'arterly	July '82 1 1/2	Ohio. 100	18,500,000	.....	.....	Ridge Avenue (Ph.). 50	420,000	semi-an	Oct. '81 11
Cin. Sand. & Clev. pf. 50	429,037	semi-an	May '82 3	Ohio and Miss. prefcc. 100	4,030,000	semi-an	Mar. '75 3 1/2	Second Avenue (N. Y.). 100	1,199,500	semi-an	July '82 2 1/2
Clev. and Mahoning*. 50	3,759,200	semi-an	Nov. '81 3 1/2	Oregon R'way & Nav. 100	6,000,000	semi-an	Aug. '81 4 1/2	Second & Third St. (Ph). 50	771,076	q'arterly	Jan. '82 4
Clev. and Pittsburg*. 50	11,444,336	q'arterly	Sept. '82 1 1/2	Oswego & Syracuse. 100	7,333,200	semi-an	July '82 3 1/2	17th & 19th sts. (Ph). 50	250,000	semi-an	July '82 3
Columbus & Xenia*. 50	1,786,200	q'arterly	Sept. '82 2	Panama. 100	7,000,000	.....	.....	Sixth Avenue (N. Y.). 100	750,000	semi-an	May '82 5
Colum. & Hocking Val. 100	2,500,200	semi-an	Aug. '81 208	Paterson & Hudson. 100	630,000	semi-an	July '82 4	Smerville (Boston). 100	113,000	semi-an	May '82 3
Concord. 50	1,500,000	semi-an	May '82 5	Paterson & Ramapo. 100	248,000	semi-an	July '82 4	South Boston. 50	600,000	semi-an	July '82 4
Concord and Ports*. 100	350,000	semi-an	July '82 3 1/2	Pemberton & Hightop*. 50	342,150	semi-an	May '82 4	Third Avenue. N. Y. 100	2,000,000	q'arterly	Ang. '82 5
Conn. and Passump. Riv. 100	2,244,400	semi-an	Aug. '82 3	Pennsylvania. 50	20,000,000	semi-an	June '81 2 1/2	13th and 16th sts. Ph. 50	334,520	q'arterly	Jan. '82 4
Connecticut River. 100	2,100,000	semi-an	July '82 4	Peoria & Bureau Val*. 100	1,200,000	semi-an	Feb. '82 4	23rd street, N. Y. 100	600,000	semi-an	Ang. '82 4
Cumberland Valley*. 50	1,292,950	q'arterly	Oct. '82 2 1/2	Philadelphia & Erie. 50	7,013,700	semi-an	Jan. '75 4	Union, Boston. 100	300,000	semi-an	Ang. '82 4
" 1st pref. 50	241,900	semi-an	Sept. '82 4	" pref. 50	2,404,000	semi-an	Sept. '82 3	Union, Phila. 50	1,005,000	semi-an	Jan. '82 7
Danbury & Norwalk. 50	243,000	semi-an	Oct. '82 2 1/2	Phil. Ger. & Norrist*. 50	2,231,900	q'arterly	Jan. '82 3	West Philadelphia. 50	750,000	semi-an	July '77 10
Dayton and Mich. *. 50	600,000	semi-an	Sept. '82 1 1/2	" pref. 50	32,726,375	q'arterly	July '82 3	CANALS.			
" pref. 50	2,402,573	semi-an	July '82 2	Phila. and Trenton. 100	1,250,100	q'arterly	Oct. '82 2 1/2	Chesapeake and Dela. 50	2,078,000	semi-an	June '75 2
Delaware*. 25	1,648,940	semi-an	July '82 3	Phila. Wil. and Balt. 50	11,587,500	semi-an	July '82 4	Delaware Division. 50	1,633,350	semi-an	Ang. '82 \$1
Del. & Bound Brook*. 100	1,										

JOHN STEPHENSON CO.
[LIMITED.]



TRAM-CAR BUILDERS,
NEW YORK.

Superior Elegance, Lightness and Durability. The result of 50 years' experience.

Adapted to all countries and climates. Combining all valuable improvements. Shipped to Foreign Parts with greatest care, and at most favorable rates.

HOUSATONIC RAILROAD.

THE ONLY LINE RUNNING
THROUGH CARS

Between New York, Great Barrington, Stockbridge, Lenox, and Pittsfield—the far-famed resort of the

Berkshire Hills

of Western Massachusetts—the "Switzerland of America."

Two through trains daily between New York City and all points on the Housatonic Railroad, from the Grand Central Depot via the New York, New Haven, and Hartford Railroad at 8:00 A. M. and 3:45 P. M.

Descriptive Guide-Book sent free by mail upon application to the General Ticket Agent.

H. D. AVERILL, Gen'l Ticket Agent.

W. H. YEOMANS, Superintendent.

General Offices Bridgeport Ct. May 1, 1881.

NEW YORK AND NEW ENGLAND RAILROAD.

The only Line running through cars between

BOSTON { Philadelphia, Baltimore and Washington, without change.

Trains leave Boston at 7:00 P. M. daily. Returning, leave Washington 1:30 P. M., arriving in Boston 7:55 A. M.

The only Line running Pullman Palace cars between

BOSTON and NEW YORK
(via Hartford and New Haven).

Express train leaves Boston 9:00 A. M., arrives at New York 4:22 P. M. Returning leaves Grand Central Depot, New York, at 4:35 P. M., arrives at Boston 7:55 A. M.

*This is the latest evening train leaving New York.

THE NORWICH LINE

—BETWEEN—

BOSTON AND NEW YORK.

Steamboat train with Drawing-Room cars leaves Boston 7:00 P. M. arrives at New London at 10:15 P. M., connecting with the new steamer **CITY OF WORCESTER**, Monday, Wednesdays and Fridays, and **CITY OF NEW YORK**, Tuesdays, Thursdays and Saturdays. Returning, steamer leaves Pier 40, North River, New York, at 4:30 P. M., connecting at New London with train leaving at 4:15 A. M., arriving in Boston at 7:55 A. M. Good night's rest on the boat.

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And for a whole year the official records of the United States Post Office Department show the arrivals of Erie Railway trains in New York, on time, to be from 15 to 27 per cent ahead of competing lines.

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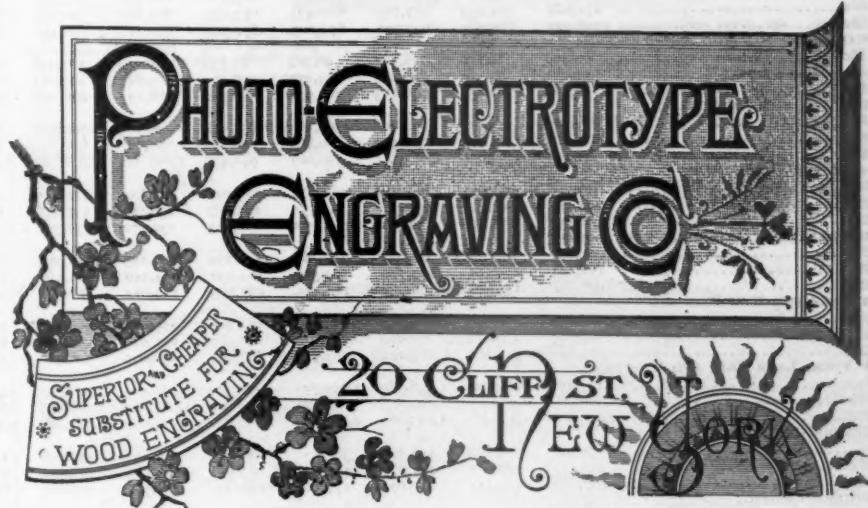
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CONTINENTAL CONSTRUCTION CO., Concord, N. H.

Letters respecting the financial affairs of the Company should be addressed—

H. F. WORRALL, Treasurer, 8 Exchange Place, Boston, Mass.

RAILROAD EARNINGS. MONTHLY.

BURL., CEDAR RAP. & NORTHERN :	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
1880.....	184,316	165,170	188,325	141,652	149,504	153,378	143,432	160,160	179,804	204,991	189,330	193,419	2,053,484
1881.....	167,750	124,510	148,551	184,680	165,630	205,912	174,351	209,112	221,801	221,748	203,880	234,812	2,259,037
1882.....	252,623	225,631	224,107	178,304	199,278	211,257	198,276	224,921	.....	.....	.....	.....	.....
CENTRAL PACIFIC :													
1880.....	1,200,614	1,070,487	1,373,438	1,356,716	1,778,488	1,724,950	1,840,067	1,973,438	1,964,997	1,120,229	2,199,466	1,905,221	20,508,112
1881.....	1,602,907	1,454,218	1,709,637	1,872,370	2,091,410	2,159,381	1,899,346	2,088,518	2,293,000	2,514,000	2,267,000	2,110,000	23,947,951
1882.....	1,876,000	1,702,000	1,987,000	2,052,000	2,353,000	2,239,000	2,020,000	2,277,000	.....	.....	.....	.....	.....
CHESTERSAKE AND OHIO :													
1880.....	202,335	168,681	222,762	221,559	199,443	214,352	238,236	259,110	247,303	211,820	240,795	218,000	2,674,308
1881.....	166,540	184,386	228,479	227,343	252,235	241,135	225,060	262,858	247,144	237,303	235,585	203,562	2,702,703
1882.....	210,455	209,708	208,981	267,454	255,939	260,753	306,831	371,175	.....	.....	.....	.....	.....
CHICAGO AND ALTON :													
1880.....	534,054	497,023	626,473	542,961	616,128	617,524	708,906	761,120	767,349	785,199	606,776	574,695	7,718,108
1881.....	487,890	461,641	529,915	558,190	548,556	635,860	676,205	769,751	768,897	750,359	680,133	635,307	7,553,988
1882.....	570,447	530,480	548,483	501,787	533,412	613,886	671,537	800,624	.....	.....	.....	.....	.....
CHICAGO AND NORTHWESTERN :													
1880.....	1,154,632	1,131,683	1,361,725	1,294,573	1,875,608	1,671,177	1,699,686	1,767,938	2,020,245	2,105,217	1,855,671	1,477,902	19,416,007
1881.....	1,240,667	963,208	1,178,795	1,474,612	1,870,006	2,306,640	1,983,031	2,315,164	2,292,676	2,341,097	2,019,037	1,855,476	21,849,309
1882.....	1,620,336	1,471,945	1,690,568	1,634,819	2,058,133	2,023,700	2,025,736	2,099,755	.....	.....	.....	.....	.....
CHICAGO, BURLINGTON AND QUINCY :													
1880.....	1,432,740	1,411,870	1,732,518	1,489,894	1,909,627	1,682,956	1,773,643	1,834,321	1,862,285	1,934,762	1,837,866	1,552,018	20,454,494
1881.....	1,307,948	1,034,821	1,418,149	1,574,371	1,679,455	2,083,803	1,888,358	2,173,945	2,265,688	2,031,001	1,816,133	1,905,490	21,334,150
1882.....	1,658,834	1,457,300	1,566,227	1,530,838	1,505,265	1,437,164	1,625,006	.....	.....	.....	.....	.....	.....
CHICAGO, MILWAUKEE AND ST. PAUL :													
1880.....	764,298	728,749	900,675	871,041	1,134,745	1,037,958	1,026,708	991,297	1,257,677	1,493,620	1,472,037	1,397,308	13,086,119
1881.....	990,847	682,717	916,989	1,259,946	1,538,491	1,729,811	1,568,706	1,678,361	1,044,672	1,590,000	1,569,000	1,855,000	17,025,462
1882.....	1,435,000	1,377,000	1,561,000	1,515,000	1,629,000	1,620,000	1,465,000	1,950,000	.....	.....	.....	.....	.....
CHICAGO, ST. PAUL, MINNEAPOLIS AND OMAHA :													
1880.....	193,827	173,078	259,783	250,208	232,146	218,093	236,995	251,013	300,833	342,052	342,894	312,173	3,122,097
1881.....	257,786	158,594	251,648	261,211	350,124	404,562	383,202	385,580	373,370	382,714	380,733	391,950	3,981,296
1882.....	307,498	315,100	405,779	356,558	406,420	363,109	331,480	394,555	483,462	.....	.....	.....	.....
CINCINNATI, INDIANAPOLIS, ST. LOUIS AND CHICAGO :													
1880.....	155,667	172,541	198,220	168,199	186,995	200,332	204,138	233,478	343,627	239,881	209,014	198,254	2,412,185
1881.....	182,523	171,511	191,005	183,710	191,061	192,299	177,167	229,858	219,977	212,606	194,805	192,623	2,296,916
1882.....	200,042	186,879	208,066	204,269	199,110	195,948	209,564	.....	.....	.....	.....	.....	.....
DENVER AND RIO GRANDE :													
1880.....	124,759	126,922	160,883	164,882	193,925	205,455	373,132	400,133	406,583	473,318	408,562	349,196	3,478,007
1881.....	307,470	317,681	398,493	433,111	514,470	584,230	548,284	606,193	589,287	605,686	566,819	643,417	6,206,812
1882.....	491,914	412,987	535,055	559,917	614,298	537,462	495,797	574,506	595,306	.....	.....	.....	.....
HANNIBAL AND ST. JOSEPH :													
1880.....	176,079	166,065	216,061	206,735	191,317	179,396	224,312	238,081	233,448	242,214	207,147	279,635	2,561,366
1881.....	154,401	122,874	176,356	190,812	172,950	190,740	201,899	210,240	202,567	313,433	201,782	180,376	2,230,961
1882.....	138,284	154,717	168,798	148,913	154,917	155,030	184,347	258,628	.....	.....	.....	.....	.....
ILLINOIS CENTRAL :													
1880.....	595,212	613,806	613,008	535,726	665,120	681,736	724,095	732,005	806,836	880,211	783,120	673,182	8,304,812
1881.....	631,281	524,499	557,789	622,493	673,259	803,887	720,004	868,407	828,847	815,238	737,218	763,475	8,586,397
1882.....	728,173	689,387	695,371	674,603	674,749	663,746	752,251	813,600	.....	.....	.....	.....	.....
INDIANA, BLOOMINGTON AND WESTERN :													
1880.....	80,498	89,690	116,185	90,374	85,733	106,954	103,438	116,732	110,622	121,343	96,621	104,619	1,233,079
1881.....	90,283	83,261	192,085	203,077	200,064	199,846	199,125	272,114	195,307	181,674	160,826	156,697	.....
1882.....	195,824	175,755	206,235	205,934	182,554	186,133	206,072	278,814	.....	.....	.....	.....	.....
LOUISVILLE AND NASHVILLE :													
1880.....	674,455	575,035	612,593	563,883	655,014	976,229	772,537	827,088	931,910	1,000,326	953,086	949,184	9,491,346
1881.....	816,900	805,124	947,959	850,802	828,720	1,227,885	817,135	876,192	951,566	1,002,950	1,065,223	1,122,285	11,346,859
1882.....	950,065	960,036	1,073,745	950,007	946,435	1,187,385	1,038,385	1,030,385	.....	.....	.....	.....	.....
MOBILE AND OHIO :													
1880.....	250,116	204,094	168,301	140,091	129,249	121,855	131,621	140,593	184,246	264,714	251,368	287,373	2,373,621
1881.....	224,347	216,768	230,916	163,551	145,803	136,517	135,548	160,790	209,044	252,921	252,434	262,025	2,404,437
1882.....	161,433	158,154	159,651	145,272	137,645	132,572	130,398	140,443	.....	.....	.....	.....	.....
NASHVILLE, CHATTANOOGA AND ST. LOUIS :													
1880.....	205,633	191,154	169,457	155,466	158,839	144,155	151,594	169,326	167,473	178,266	182,087	175,966	2,049,484
1881.....	178,143	190,866	207,710	183,525	104,430	154,549	150,430	168,317	179,979	172,121	154,059	173,127	2,075,256
1882.....	159,994	159,661	161,005	154,155	137,645	131,904	160,991	1,030,385	.....	.....	.....	.....	.....
NEW YORK AND NEW ENGLAND :													
1880.....	164,232	149,907	183,845	179,689	183,702	219,801	205,056	249,885	235,642	215,491	210,856	198,108	2,396,302
1881.....	189,749	173,614	212,019	216,913	217,185	231,518	246,821	280,524	299,573	261,199	242,412	237,729	2,809,255
1882.....	213,840	217,261	265,222	263,544	263,244	260,060	328,920	353,720	.....	.....	.....	.....	.....
NEW YORK, LAKE ERIE AND WESTERN :													
1879.....	1,147,173	1,207,393	1,356,780	1,372,755	1,350,574	1,230,470	1,273,533	1,450,223	1,492,497	1,713,697	1,515,835	1,398,224	16,509,127
1880.....	1,206,157	382,657	452,900	487,273	465,588	487,287	440,811	498,008	429,505	449,664	487,160	476,022	5,443,697
1881.....	1,443,437	1,425,765	1,847,621	1,709,057	1,776,691	1,794,98							

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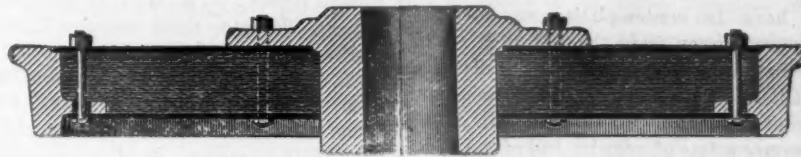
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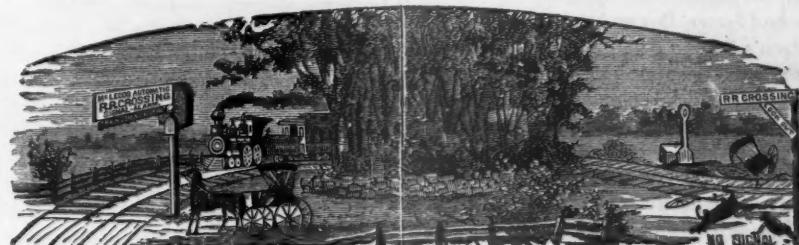
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"The McLeod Air Signal is an ingenious and inexpensive device by which the coming of a train is announced far in advance, both by visible and audible signals." [Mass. R. R. Com. Report.]

This signal has been fully tested on the New York and New England Railroad at Dudley and Bird Streets, by practical operation, and has proved a complete success, to the entire satisfaction of the many prominent Railroad men and experts who have watched and examined it. It provides an Automatic Block, Crossing, Station, Switch, Bridge, Yard and Curve Signals, Gate and Revolving Lanterns. Being operated by the weight of trains passing over an incline bar, forcing common air through a tube, by means of a bellows, which is positive in its action, it is highly commended by all railroad officials who examined it.

The company can shortly fill orders to place it on any railroad, and invite communication from Railroad Officials from all parts.

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New York Office with Col. Thos. R. Sharp, 115 Broadway

OUR CANADIAN LETTER.

[From our Special Correspondent.]

RAILWAY construction is being vigorously pushed forward in the Dominion, and the present may well be described as a railway period. There are already nearly 12,000 miles of railways in operation in Canada. The railway connection between the Maritime Provinces and Quebec and Ontario being complete, the country is now looking anxiously forward to the time when there shall be an all-rail route between British Columbia and Halifax, N. S., through Canadian Territory.

THE OTTAWA AND GATINEAU VALLEY RAILWAY.

The Ottawa and Gatineau Valley Railway Company, with James M. Currier, Esq., ex-M. P., president; C. H. Mackintosh, Esq., M. P., vice-president; J. Murray Mitchell, Esq., C. E., F. G. S., managing director and chief engineer, and H. B. Mackintosh, Esq., secretary, in addition to the early construction of their main line, between Hull opposite Ottawa to Desert River, have in contemplation an extensive exploratory survey from the Desert River to James' Bay (in the Hudson Bay); the distance from Ottawa to the Bay by the Hurricanaw River route being only 450 miles. This route will traverse a line of country full of valuable minerals of a highly merchantable character, offering a field for capitalists and farmers second to none on the Continent. Professor Bell and other eminent authority say that the 60,000 square miles situated between James' Bay and the Height of Land, north of Lake Superior and Lake Huron, are exceeding valuable in lumbering and mining resources, and owing to its comparatively warm climate, adapted to sustain a very considerable agricultural population. Professor Bell reports that around James' Bay and up the eastern side of Hudson's Bay lie great deposits of iron and coal; so close together that with the cheap water freights which the region may afford, the district about James' Bay may yet become another Pennsylvania. It is expected that work will be commenced on the railway this fall. The Ottawa and Gatineau Valley Railway, between Ottawa and the Desert, taps the richest phosphate, iron and other minerals of Canada; and the energetic gentlemen at its head are guarantors of success.

THE INTERNATIONAL RAILWAY.

The International Railway, which is now nearly completed between Sherbrooke and a point 16 miles over the National border—near Lake Megantic—will, it is intended, join the road at Mattawanka, Maine, which extends from New Brunswick west, and is called the "European and North American." When the Sherbrooke extension of about 130 miles is completed (this fall), it is proposed to consolidate the line from St. Johns to Sherbrooke. The consolidated bonds will be issued upon the credit of the whole road. This road—which does not compete with water—will be some 350 miles shorter from Montreal to St. John than the Intercolonial, and 150 miles shorter than any other possible route. The International, when extended to Montreal, will tap the Canadian Pacific and Grand Trunk, and will no doubt become one of the most im-

portant of Canadian railways. The Hon. John Henry Pope, Minister of Agriculture, is the principal owner of the road. He is a man of the highest standing for integrity and energy, and no doubt when the bonds of the "International and North American Railway are placed on the market, they will be eagerly taken up.

THE CANADA AND ATLANTIC RAILWAY.

This railway is now completed between Coteau Landing on the Grand Trunk and Ottawa. Trains have just begun running between Ottawa and Montreal, and the trip can be made in three hours, being three-quarters of an hour shorter than any other route. When the bridge is built across the St. Lawrence at Coteau, and the road completed to Rouses Point, immense quantities of lumber and other freight will be carried over it. Mr. Linsley, the contractor, deserves great credit for the speedy completion of the road, which is without doubt one of the finest in America.

The following gentlemen are stopping at the Russell House : W. K. Muir, Detroit; Edmund Wragge, Toronto, chief engineer T. G. & B.; Walter Townsend, general manager T. G. & B.; L. D. Boulton, solicitor Northern Railway; E. M. Chadwick, solicitor T. G. & B.; Hector Cameron, solicitor O. & Q.; Mr. Blackstock, O. & Q.; H. D. Lumsden, chief engineer O. & Q.; and Hugh Ryan, of Perth. The object of their visit is to confer with the Minister of Railways in reference to the way in which one road shall cross another.

THE PONTIAC AND PACIFIC RAILWAY.

Work on the Pontiac and Pacific Junction Railway is being pushed forward with all possible dispatch, seven miles being graded. Notwithstanding that \$1.40 per day is paid to laborers and fare paid to works, very few can be hired, although many are required.

A number of representatives of the Ontario and Quebec Railway, together with representatives of the Northern, T. G. & B., and Midland railways, waited on the railway committee of the Privy Council this afternoon with reference to the O. & Q. Railway's application for leave to cross the other railways. The committee decided to permit the crossing by the O. & Q. R. R. of the Midland at Belmont, Peterboro, Ashburnham and Myrtle, and the Kingston and Pembroke at Sharbot Lake. The committee reserved decision in reference to the crossings at Davenport, near Toronto, of the Northern and T. G. & B. railways, as there are some gradings to be made for shunting yards of other railways.

"W."
OTTAWA, CANADA, Oct. 3, 1882.

Reduction in the Price of Paper Wheels.

THE completion of their large works at Morris, Ill., the improvements of those at Pullman and Hudson, thus enabling them to meet the largely increased demand, has caused the Allen Company to announce a reduction of the price of their 42 inch Broad Tread wheel to \$95, and the 42 inch Narrow Tread to \$85. This is a reduction of \$5 per wheel, and must result in still further increasing the orders for this popular wheel.

ADVERTISE IN THE RAILROAD JOURNAL.

OUR MEXICAN LETTER.

[From Our Special Correspondent.]

ON September 4th the Mexican National Construction Company opened the first seventy-four kilometres of this end of their road, to Laredo, to passenger traffic. This division (Toluca division) passes over a mountain chain ten thousand feet above the level of the sea. The grades, curves, bridges and views are said by one of the officials of the Vera Cruz line to surpass those of that company. The first fifteen kilometres pass over the fertile plain of Mexico, and then strike the mountains, rising fifteen hundred feet in as many miles. The ascent gives a grand panoramic view of the Mexico Valley, dotted over with romantic looking villages. The old historic city, framed in by silvered lakes and green mountains, seems to rest just beneath the glittering peaks of Popocatapitle and the "Whilo Lady."

Salazar, the highest station on the line, rests on a sterile plateau on the top of the mountain, and a passenger train that leaves the warm temperature of the valley an hour before frequently enters here a heavy snowstorm.

The descent on the west side of the mountain is not less varied and beautiful, with its long stretch of the Lerma River and the clean, white city of Toluca in the distance. Toluca is the capital of the State of Mexico, and is credited with fifty thousand inhabitants. Agriculture is its principal support. It is surrounded by one of the finest farming valleys in the Republic.

Railroading in Mexico is a success beyond expectation. Both the National and Central roads, are pushed beyond their capacity to handle freight, so far as opened, and the passenger traffic is a surprise to the most sanguine. The "National" completed on September 13 ninety-three miles of road, which entitles them to three million of dollars from the Mexican Government. The City of Mexico has made rapid progress during the past year. It is fast approaching the cities of the North with its net-work of wires.

The Mexican Telephone Company have seven hundred wires run into their new Exchange, at Calle Tacuba No. 2, and are doing a "rattling" business. J. D. Haines, secretary and treasurer of the above company, is expected in this city October 1.

W. L. Thompson, chief engineer of the Mexico and Hidalgo Railroad, is in town.

Walter Hinckman, president of the Mexican National Construction Company, will likely remain in the city some months.

We are now entering the dry season, so railroad work will progress more rapidly than in the past six months.

We did not get our mail until the 13th instead of the 11th, on account of a "norther" at Vera Cruz keeping the steamer out of harbor. She finally had to land in Sacrificios Bay.

"J. O., JR."

CIUDAD DE MEXICO, Sept. 14, 1882.

A NEW line of ferry-boats between the terminus of the Second avenue elevated railroad on the Harlem River and the New York and New Haven Railroad immediately opposite began running on the 2d inst.



SUBSCRIPTION PRICE REDUCED

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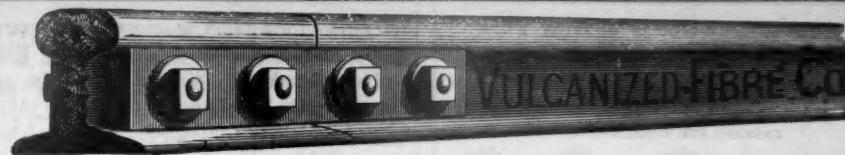
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We give on editorial page our new subscription rates, which are so changed in the belief that it will not only prove acceptable to many who desire to become regular readers of the paper, but that it will meet with the hearty approval of our advertising patrons, who are rapidly filling up the pages offered to them since the improvements in the JOURNAL have been started.

We will send you the "Journal" for three months for \$1. Try it, and you will be glad to continue taking it.



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which form non-metallic, permanently elastic compensating cushions, absorbing shocks and vibrations, and absolutely locking the nuts. These Washers have been adopted by a large number of railroads as the cheapest and best device in use. Flexible vulcanized-fibre dust guards and oil box packings, which are absolutely unaffected by oil and grease, are far more durable than leather and much cheaper.

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Proprietors JENKINS PATENT VALVES, PACKING, &c.
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For the preparing of estimates no charge is made, and the applicant is placed under no obligation to transmit his advertising business through us unless it appears to him that by doing so he will best advance his own interests.

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TUBING, SPRINGS,
GASKETS, Etc.

RUBBER CLOTHING, LACE
LEATHER, BELT HOOKS,

RAILROAD, MINING, AND
MILL SUPPLIES.

No. 21 Park Place,
NEW YORK.

Imports of Dry Goods at New York.

The Imports of Foreign Dry Goods at New York for the month of September, were :—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool....	\$1,714,521	\$2,025,466	\$2,402,550
Manufs. of cotton....	1,385,117	1,604,868	1,509,154
Manufs. of silk....	2,851,823	3,390,794	3,685,368
Manufs. of flax....	756,309	1,150,570	1,110,428
Miscell. dry goods....	713,184	888,511	778,307

Total ent. for consumption.....	\$7,420,954	\$9,120,209	\$9,545,817
WITHDRAWN FROM WAREHOUSE.			

	1880.	1881.	1882.
Manufs. of wool....	\$1,181,035	\$981,377	\$1,084,115
Manufs. of cotton....	308,226	233,392	318,482
Manufs. of silk....	796,869	473,909	570,177
Manufs. of flax....	508,105	357,925	369,206
Miscell. dry goods....	227,118	191,019	162,001

Total withdraw'd from warehouse.....	\$3,111,353	\$2,237,622	\$2,504,041
Add ent. for con....	7,420,954	9,120,209	9,545,817

Total thrown on the market.....	\$10,532,307	\$11,357,831	\$12,049,858
ENTERED FOR WAREHOUSING.			

	1880.	1881.	1882.
Manufs. of wool....	\$1,033,241	\$682,575	\$925,650
Manufs. of cotton....	327,375	159,721	226,533
Manufs. of silk....	728,164	338,450	582,858
Manufs. of flax....	421,016	341,158	357,844
Mis. dry goods....	181,536	176,162	161,534

Total ent. for ware-house.....	\$2,691,332	\$1,698,066	\$2,254,419
Add entered for con-sumption	7,420,954	9,120,209	9,545,817

Total ent. at port....	\$10,112,286	\$10,818,275	\$11,800,236
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The Imports of Foreign Dry Goods at New York for nine months from January 1, were :—

ENTERED FOR CONSUMPTION.

	1880.	1881.	1882.
Manufs. of wool....	\$16,431,409	\$14,552,410	\$18,579,289
Manufs. of cotton....	18,038,103	17,150,507	19,054,555
Manufs. of silk....	24,423,895	22,633,533	29,469,203
Manufs. of flax....	10,756,705	9,525,804	10,923,125
Mis. dry goods....	6,779,934	6,514,938	7,095,193

Total entered for consumption ...	\$76,430,046	\$70,377,282	\$85,121,367
WITHDRAWN FROM WAREHOUSE.			

	1880.	1881.	1882.
Manufs. of wool....	\$6,107,931	\$6,769,279	\$6,149,296
Manufs. of cotton....	3,242,304	3,720,482	3,033,558
Manufs. of silk....	4,683,234	4,226,059	4,716,786
Manufs. of flax....	3,472,701	4,049,566	3,187,057
Mis. dry goods....	1,189,846	1,838,501	1,766,779

Total withdrawn from warehouse....	\$18,996,016	\$20,589,887	\$18,853,476
Add entered for consumption ...	76,430,046	70,377,282	85,121,367

Total thrown on the market.....	\$95,426,062	\$90,967,169	\$103,974,843
ENTERED FOR WAREHOUSING.			

	1880.	1881.	1882.
Manufs. of wool....	\$8,588,929	\$5,528,644	\$6,907,381
Manufs. of cotton....	3,713,931	3,049,252	3,264,143
Manufs. of silk....	5,222,536	3,666,177	4,816,689
Manufs. of flax....	4,990,693	3,252,721	3,232,888
Mis. dry goods....	1,854,634	1,966,209	1,875,933

Total entered for warehouse	\$24,372,713	\$17,463,003	\$20,097,034
Add entered for consumption ...	76,430,046	70,377,282	85,121,367

Total ent. at port. \$100,800,769	\$87,840,285	\$105,218,401
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Trees Along Railways.

THE Union Pacific managers commenced two years since ornamenting their stations with trees, evergreens, etc., such as is practiced by the leading lines in the East. Large parks are planted around the stations; and, for the first three hundred miles west of the Missouri River, already make a good showing. The importance of timber growing, both for fuel, protection, and beautifying the landscape, is well understood and acted upon in Nebraska, as one hundred thousand acres of cultivated timber within its limits attest.

For deciduous trees the company have a

preference for *catalpa speciosa*, which grows rapidly and is perfectly hardy. Box Elder, Hard and Soft Maple, White Ash and Elm have done well. On the Laramie plains the Aspen and narrow-leaved Cottonwood seem to be the most suitable. The latter is a much better shade tree than the white or yellow, and the Box Elder of the mountains and valleys is superior to the Negundo of the East, having a more upright growth. The beautiful Evergreens of the Rocky Mountains have proved more successful in their growth, and have suffered much less in transplanting than Eastern nursery-grown trees. Six hundred of the Silver and Douglass Spruce, the Silver Fir and two varieties of pine have been planted the present season. The trees are from four to five feet high, and succeed well with proper digging, careful planting and mulching. At the stations on the sage plains, when there is an abundant supply of water, there is no doubt of the success of Evergreen growth. The farthest point reached this year is 620 miles west of Omaha.

The Union Pacific Railway, besides setting the example of planting trees largely, have used every persuasion to induce farmers along their line to set out trees, and that largely, particularly of those kinds of timber which will be of service for ties. Forest planters are realizing that there is no more profitable crop than timber, and Western farmers that there is no section of the country better adapted for the purpose than the prairies. Pine forests cannot be planted too soon on the great plains, and there cannot be a question as to their success and great future profit. Trees thrive wonderfully well on the prairie soil, and take but a few years to furnish fuel, and soon are large enough for other purposes.—*Tribune and Farmer.*

What Made the Other Passengers Glad.

THE seventh passenger was a lady. There was an abundance of room in the car, but as she entered an elderly man rose up with a great flourish and called out: "Take my seat, madame. I am not the kind of a man to keep a seat in the street car and oblige a lady to stand up." She sank down with a half-bow in acknowledgment, and he held out his hand for her fare with the remark: "Some men are brutal enough to permit a lady to stumble to the fare-box and back, but that isn't me." He took her ticket and deposited it, and then hung to the strap and continued: "And I know men who think that passing a lady's fare to the box gives them the privilege of entering into conversation with her about the weather, crops, rate of mortality, politics, and so forth. That isn't me, however." The speech had its due effect upon all the other passengers, including the victim, and the man let out another link by remarking: "Giving up my seat in the car to a lady does not entitle me to offer to assist her off the car, or ask if she is married or single, or in any manner break down the stern barriers of social formality, and I know it. It is simply an act of courtesy, and I shall so consider it." There was something painful in the situation to the other six, but relief came by the man reaching the end of his journey. As he was

ready to get off he looked back and said: "I have seen men whose conceit obliged them to lift their hats and bow to everybody in the car before stepping off, but that isn't me. I shall step off without any formality, and without hoping that I will be missed." When the six looked back and saw him sprawled in the dust they were glad of it.—*Detroit Free Press.*

Smith's Improved Railroad Signal.

FOR ALL ROAD CROSSINGS AND PLACES OF DANGER.

THE following brief description of this valuable appliance will be of interest to railroad companies:

When a train is at a distance off it strikes a bowed spring, so arranged in close connection to the rail that the passing train will cause the spring to give way six inches. This motion is carried by a steel wire or cable to the point of danger in a tube or pipe imbedded in the ground to be out of the way of repairing the track. At a point of danger, in a suitable box where it can be seen, is a signal and gong; when this wire is pulled by the spring, it rings a gong or bell and pushes out a signal, and leaves the signal exposed till the train has passed; and if there is a train each way there will be a signal each side the crossing. When the train passes it operates another spring, which will push back the signal, showing the danger is passed. It can also be used in tunnels, so that a train entering the tunnel will raise or expose a signal, and by a bowed spring at the other end of the tunnel will lower or put back the signal, thus showing that the train is out of the tunnel and the track clear. So in passing through deep cuts and crooked places a series of signals can be left up at a distance back of the train, so that one train need not run into another except through carelessness.

BEFORE long some enterprising church, awakening to the fact that it is behind the age, will discard its bell and put in a steam whistle.

THE European and North American Railway Company assumed control of the Maine Central Railroad under the terms of a recent lease on the 1st inst.

COAL will be burned on the locomotives of the Canadian Pacific Railway this winter. The steamers will leave it at the Government dock at Fort William, as there will be no room at Prince Arthur's Landing, on account of all the docks being used for freight.

THE other day an Arkansaw man secured a free pass over a railroad. He was very much pleased at first, but after discovering that if injured in an accident he could not recover damages, he approached the superintendent and said: "Look here! how about this thing?" "What's the matter with it?" "What if I get killed on the road; my wife wouldn't recover damages." "No, sir." "Then I don't want the pass. I ain't got no wife nor no relations, but I want to feel that if I had a wife she'd get pay for my death. I'm much obliged to yer, but reckon I'll have to walk."—*Arkansaw Traveller*

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PUSHER**

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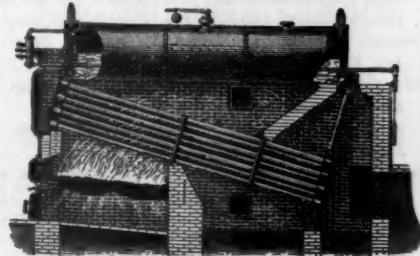
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Editor AMERICAN RAILROAD JOURNAL:

In your issue of the 26th ult. I notice an article in relation to the Therm Motor. The article contains several misstatements; but the Motor, owing to faulty adjustments and a combination of circumstances, did not work to our entire satisfaction. We are now remedying the defects and shall very shortly again try the Motor, when we shall be glad to have your JOURNAL represented. We are well satisfied that we can do all we claim, and that but a short time will elapse before it can be proven that petroleum, as a fuel for locomotives, can be used more advantageously than coal.

ELBRIDGE BAKER.

BOSTON, Sept. 29, 1882.

Wood Finish.

RICHNESS of effect may be gained in decorative woodwork by using woods of different tone, such as amaranth and amboyna, by inlaying and veneering. The Hungarian ash and French walnut afford excellent veneers, especially the burls or gnarls. A few useful notes on the subject are given by a recent American authority. In varnishing, the varnishes used can be toned down to match the wood, or be made to darken it, by the addition of coloring matters. The patented preparation known as "wood fillers" are prepared in different colors for the purpose of preparing the surface of wood previous to the varnishing. They fill up the pores of the wood, rendering the surface hard and smooth. For polishing mahogany, walnut, etc. the following is recommended: Dissolve beeswax by heat in spirits of turpentine until the mixture becomes viscid; then apply by a clean cloth, and rub thoroughly with a flannel or cloth. A common mode of polishing mahogany is by rubbing with linseed oil and then by a cloth dipped in very fine brickdust; a good gloss may also be produced by rubbing with linseed oil, and then holding trimmings or shavings of the same material against the work in the lathe. Glass paper, followed by rubbing, also gives a good luster.

There are various means of toning or darkening woods for decorative effect—logwood, lime, brown soft soap, dyed oil, sulphate of iron, nitrate of silver exposed to sun's rays, carbonate of soda, bichromate and permanganate of potash, and other alkaline preparations are used for darkening the wood; the last three are especially recommended. The solution is applied by dissolving one ounce of the alkali in two gills of boiling water, diluted to the required tone. The surface is saturated with a sponge or flannel, and immediately dried with soft rags. The carbonate is used for dark woods. Oil tinged with rose madder may be applied to hard woods like birch, and a red oil is prepared from soaked alkanet root in linseed

oil. The grain of yellow pine can be brought out by two or three coats of japan much diluted with turpentine, and afterwards oiled and rubbed. To give mahogany the appearance of age, lime water used before oiling is a good plan. In staining wood, the best and most transparent effect is obtained by repeated light coats of the same. For oak stain, a strong solution of oxalic acid is employed; for mahogany, dilute nitrous acid. A primary coat, or a coat of wood-filters, if advantageous. For mahogany stains the following are given: two ounces dragon's blood dissolved in one quart of rectified spirits of wine, well shaken; or raw sienna in beer, with burnt sienna to give the required tone; for darker stains boil half a pound of madder and two ounces of logwood chips in one gallon of water, and brush the decoction while hot over the wood. When dry, paint with a solution of two ounces of potash in one quart of water. A solution of permanganate of potash forms a rapid and excellent brown stain.—*Building News.*

List of Recent Patents for Inventions Relating to Railway Interests.

264,849. Street-Railway Car: SYLVESTER BISSEL, Hartford, Conn. Filed March 10, 1882.
 264,871. Boiler-Furnace: MARK S. FOOTE, Burlington Iowa. Filed Aug. 8, 1882.
 264,892. Device for Loading and Landing Floating Lumber-Cribs: SUMNER T. MCKNIGHT, Hannibal, Mo. Filed Aug. 18, 1882.
 264,905. Smoke-Consumer for Locomotives: HENRY A. SPKAR, Charlestown, and ALBION P. WIGHT, JR., North Adams, assignors of one-half to FRANK BROWNELL, Boston, Mass. Filed Aug. 14, 1882.
 264,913. Means for Warming Railway-Cars by Steam: WILLIAM H. WARD, Pittsburgh, Pa. Filed Jan. 19, 1881.
 264,921. Car-Spring: SUMNER A. BEMIS, Springfield, Mass. Filed Aug. 2, 1882.
 264,926. Car-Coupling: DANIEL CARLOUGH, Paterson, N. J. Filed July 28, 1882.
 264,929. Car-Coupling: JOHN E. H. CHAPMAN, Harrisburg, Tex. Filed April 25, 1882.
 264,937. Compound Engine: HENRY D. DUNBAR, North Hartland, Vt. Filed Dec. 29, 1881.
 264,948. Street-Car: SAMUEL HOWE, Oakland, Cal. Filed July 25, 1882.
 264,976. Railroad-Rail: AARON C. VAUGHAN, Shane's Crossing, Ohio. Filed Feb. 7, 1882.
 264,991. Device for Changing Gauge of Railway-Cars: DAVID ANDERSON, Fairview, Stawell, Victoria. Filed Aug. 10, 1882.
 265,011. Car-Coupling: KIRK S. BLANCHARD, Clarendon, N. Y. Filed May 26, 1882.
 265,023. Electric Car-Brake: PHILIP V. CONOVER, Uvalde, Tex. Filed Aug. 8, 1882.
 265,031. Car-Coupling: DANIEL W. DEAL, Toddville, Iowa, assignor to himself and JOSEPH VOWELS and JOHN ALL, both of same place. Filed June 21, 1882.
 265,039. Grate for Boiler-Furnaces: MURILLO DOWNER and JOSEPH MOHR, Chicago, Ill. Filed Aug. 2, 1882.
 265,055. SPARK-ARRESTER: SAMUEL L. FRENCH and RICHARD B. MELLON, Ligonier, Pa. Filed Jan. 31, 1882.
 265,058. Car-Coupling: DAVID W. GLIDDEN, Montrose, Pa. Filed Jan. 14, 1882.
 265,063. Car-Coupling: HALE E. HAWK, Kansas City, Mo. Filed Jan. 4, 1882.
 265,065. Car-Coupling: FRANCIS M. HAZLETON, Red Bluff, Cal. Filed March 11, 1882.
 265,082. Rotary Steam-Engine: GEORGE HOPKINS, Glen Allen, Va. Filed Aug. 17, 1882.
 265,129. Pneumatic Elevator for Railways: CHAS. A. NEEDHAM, New York, N. Y., assignor to himself and E. P. NEEDHAM, same place. Filed July 24, 1882.
 265,132. Switch Stand and Lock: DANIEL O'CONNOR, Little Rock, Ark. Filed April 18, 1882.
 265,133. Car-Coupling: JAMES W. OULTON, Charlestown, Mass. Filed Dec. 31, 1881.
 265,138. Steam-Engine: ALBERT T. POWELL, Stamford-

VILLE, N. Y., assignor to the Powell Steam Motor Company, (Limited,) same place. Filed Nov. 4, 1881.

265,145. Fare Register and Recorder: NEWMAN A. RANSOM, Chicago, Ill., assignor to the Railway Register Manufacturing Company, Buffalo, N. Y. Filed Aug. 30, 1879.

265,162. Car-Coupling: JAMES E. SMITH, Wilkes-Barre, Pa. Filed March 10, 1882.

265,180. Lubricator: ALLEN W. SWIFT, Elmira, N. Y. Filed Aug. 21, 1882.

265,200. Car-Brake: WATSON P. WIDDIFIELD and ANSON T. BUTTON, Uxbridge, Ontario, Canada. Filed Feb. 17, 1882.

TRACK-LAYING has commenced on the Correctionville branch of the Chicago and Northwestern Railway. On the Iowa division of this road, known as the Calliope branch, track-laying has reached Orange City, twenty-five miles beyond the last reported terminus.

THE Chicago, Milwaukee and St. Paul Railway Company has contracted with the Pullman Car Company to take control of the sleeping-car system over its 4,000 miles of road. This forms a continuous system of Pullman sleeping cars from New York to Portland, Oregon.

A DEPOSIT of mica and kaolin of excellent quality has been discovered in Lancaster county, Penn. The mica was struck at a depth of twenty-five feet, and between the stratas layers of the finest quality of kaolin were found. Samples of mica taken out are valued at \$8 per pound.

IN the Supreme Court of Pennsylvania, at Pittsburgh, on the 2d inst., Judge Trunkey decided that a railroad company must honor its tickets, whosoever sells them, and that, therefore, the ticket on its face entitles the holder to the rights of a passenger between points named on the ticket.

THE Winnipeg Sun says that the estimate of work done by Messrs. Langdon, Shepherd & Co., contractors for the Canadian Pacific Railway, during the month of August, was five hundred thousand dollars. They completed in the same time ninety-two miles of railway, and their bill of quantities for each month was fourteen hundred thousand yards.

AN underground telegraph system between Paris and Marseilles is nearly ready for use in France. Four weeks ago 150 men were engaged in pushing forward the work from both ends, following the main roads and the right bank of the Rhone. From a description by Iron, the English journal, it appears that the pipes are laid at a depth of more than a metre and a half, and chambers for facilitating repairs are placed at about every 500 metres. They resemble large cast iron cauldrons with covers, and have apertures for receiving the ends of the two pipes which they connect. Every 100 metres the pipes are united by cast-iron couplings, which will permit of inspecting and repairing the cable, and the joint between each pipe is made with an india-rubber washer or lead collar. "The work is pushed forward with vigor," adds the same paper, "and it is proposed eventually to connect this cable, which will traverse France from north to south, with the cables of the Mediterranean and Atlantic."

BUSINESS CARDS.

A LLIN PAPER CAR WHEEL CO., 240 BROADWAY,
New York.

B ROWN BROTHERS & CO., BANKERS AND BROKERS,
59 Wall Street, N. Y.

B ABCOCK & WILCOX CO., WATER TUBE STEAM
Boilers, 30 Cortlandt Street, N. Y.

B ROWN MANUFACTURING CO., ABSORBENT
Wiper Cloths, Providence, R. I.

B EARDSLEY, D. N. & CO., MANUFACTURERS OF
Superior Oak and Chestnut Lumber, and Railroad
Ties, 9 Murray Street, N. Y.

C HESTER STEEL CASTING CO., MANUFACTURE
Steel Castings, Cross-heads, Rocker-arms, Piston-
heads, etc., for Locomotives, 407 Library St., Phila., Pa.

D AVIDS, JOHN B. & CO., WRITING INKS, 184 WIL-
liam Street, N. Y.

D AVIS, JOHN H. & CO., BANKERS AND BROKERS,
17 Wall Street, N. Y.

D ODGE & SINCLAIR, MANUFACTURERS OF RUB-
ber and Leather Belting, 21 Park Row, N. Y.

E VANS, GEO. A. IRON AND STEEL RAILS, 74 WALL
Street, N. Y.

E AGLE TUBE CO., BOILER TUBES, 614 to 626 WEST
Twenty-fourth Street, N. Y.

E AMES VACUUM BRAKE CO., RAILWAY TRAIN
Brakes, 15 Gold Street, N. Y.

F AIRBANKS & CO., STANDARD SCALES, RAILROAD
and Warehouse Trucks, and Copying-presses, 311
Broadway N. Y.

G ORDON & DUGGAN, RAILWAY SWITCHES, 28
State Street, Boston, Mass.

G UEST, WM. A. & CO., IRON AND STEEL RAILS,
41 and 43 Pine Street, N. Y.

G EORGE, EVAN P. JR., COUNSELLOR AT LAW AND
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I VISON, BLAKEMAN, TAYLOR & CO., STEEL PENS
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J OHN STEPHENSON CO., TRAM-CAR BUILDERS,
New York.

K AOLATYPE ENGRAVING CO., 104 FULTON ST.,
New York.

K NOX & SHAIN, MANUFACTURERS OF ENGINEER-
ing and Telegraphic Instruments, 716 Chestnut
Street, Philadelphia, Pa.

M OLLER & SCHUMANN, MANUFACTURERS OF
Coach and Car Varnishes, Brooklyn, N. Y.

N ATIONAL TUBE WORKS CO., MANUFACTURE
Wrought Iron Pipes and Tubes, 104 and 106 John
Street, N. Y.

N ATIONAL RAILWAY PATENT WASTE COMPANY
240 Broadway, N. Y.

P ARDNER CAR WORKS, PARDEE, SNYDER & CO.,
(Limited) Watsontown, Pa.

P ERKINS & CHOATE, AGENTS FOR STEEL OR IRON
Rails, 23 Nassau Street, N. Y.

R IEHLE BROS., STANDARD SCALES AND TESTING
Machines, 115 Liberty Street, N. Y.

S HUGG BROS., DESIGNERS AND ENGRAVERS ON
Wood and Photo-Engravers, 18 Cortlandt St., N. Y.

S WIFTS IRON AND STEEL WORKS, MANUFAC-
turers of all Weights of Standard and Narrow
Gauge Rails, 26 West Third St., Cincinnati, Ohio.

T HE CONGDON BRAKE SHOE COMPANY, IMPROV-
ed Car Brake Shoe, 142 Dearborn Street, or opposite
Tribune Building, Chicago.

T HE RAMAPO IRON WORKS, MANUFACTURERS OF
the Tracy Safety Switch, and General Railroad
Equipment. Works and office: Ramapo, Rockland Co.,
New York.

U NITED STATES MINERAL WOOL COMPANY,
16 Cortlandt Street, N. Y.

V ANDERBILT & HOPKINS, RAILROAD TIES, 120
Liberty Street, N. Y.

V ALENTINE & CO., MANUFACTURERS OF FINE
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Statement of the Public Debt of the United States, October 1, 1882.

DEBT BEARING INTEREST.		Amount Outstanding.	Accrued Interest.
6 per cent loan 1863-'81 continued at 3½ per cent		\$3,693,200 00	\$32,315 50
5 per cent funded loan of 1881, continued at 3½ per cent.....	177,062,900 00	1,032,866 92	
3 per cent loan of July 12, 1882.....	237,233,200 00	1,186,166 00	
4½ per cent funded loan of 1891.....	250,000,000 00	937,500 00	
4 per cent funded loan of 1907.....	738,916,250 00	7,389,162 50	
4 per cent refunding certificates.....	435,800 00	4,358 00	
3 per cent navy pension fund.....	14,000,000 00	105,000 00	

Aggregate of debt bearing interest..... \$1,421,341,350 00 \$10,687,368 92
Interest due and unpaid..... 1,532,344 05

DEBT ON WHICH INTEREST HAS CEASED SINCE MATURITY.

	Amount Outstanding.	Interest due and unpaid.
4 to 6 per cent. old debt, 1837.	\$57,665 00	\$64,174 81
5 per cent. Mexican indemnity stock, 1850-'52.....	1,104 91	85 74
6 per cent. bonds, 1847-'67.....	1,250 00	22 00
6 per cent. bounty land scrip, 1847-'49.....	3,275 00	213 06
5 per cent. Texas indemnity stock, 1850-'64.....	20,000 00	2,945 00
5 per cent. bonds, of 1858-'74.....	7,000 00	875 00
5 per cent. bonds, of 1860-'71.....	10,000 00	600 00
6 per cent. 5-20 bonds, 1862, called.....	366,900 00	7,888 11
6 per cent. 5-20 bonds, June 1864, called.....	57,400 00	1,056 37
6 per cent. 5-20 bonds, 1865, called.....	70,550 00	18,548 11
5 per cent. 10-40 bonds, 1864, called.....	301,000 00	64,692 85
6 per cent. Consol. bonds, 1865, called.....	369,700 00	12,205 69
6 per cent. Consol. bonds, 1867, called.....	862,450 00	111,172 92
6 per cent. Consol. bonds, 1868, called.....	261,000 00	21,040 42
6 per cent. loan, Feb. 8, 1861, matured Dec. 31, 1880, called.....	77,000 00	4,830 00
5 per cent. funded loan 1881, called.....	849,600 00	7,795 60
Oregon War Debt, March 2, 1861, matured July 1, 1881.....	8,100 00	1,579 50
6 per cent loan of July 17 and Aug. 5, 1861, matured June 30, 1881.....	526,850 00	11,242 50
6 per cent loan of July 17 and Aug. 5, 1861, continued at 3½ per cent, matured Dec. 24, 1881, called.....	4,395,500 00	60,380 38
6 per cent. loan of March 3, 1863, matured June 30, 1881.....	158,600 00	5,488 50
6 per cent loan of March 3, 1863, continued at 3½ per cent, matured August 1, 1882, called.....	6,855,200 00	43,743 73
1-10 to 6 per cent. Treasury notes, prior to 1846.....	82,525 35	2,668 06
1-10 to 6 per cent. Treasury notes, 1846.....	5,900 00	200 60
6 per cent. Treasury notes, 1847 to 6 per cent. Treasury notes, 1857.....	950 00	57 00
6 per cent. Treasury notes, 1861.....	1,700 00	99 00
7 3-10 per cent. 3 years' Treasury notes, 1861.....	3,000 00	364 50
5 per cent. 1 year notes, 1863.....	16,300 00	1,104 43
5 per cent. 2 year notes, 1863.....	41,735 00	2,998 5
6 per cent. compound interest notes, 1863-'64.....	32,700 00	1,622 30
7 3-10 per cent. 3 years' Treasury notes, 1864-'65.....	219,860 00	14,920 47
6 per cent. certificates of indebtedness, 1862-'63.....	138,850 00	20,422 62
4 to 6 per cent. temporary loan, 1864.....	4,000 00	253 48
3 per cent. certificates, called.	2,960 00	244 19
	5,000 00	394 31

Aggregate of debt on which interest has ceased since maturity..... \$15,559,625 26 \$515,030 10

DEBT BEARING NO INTEREST.		
Demand notes, 1861-62.....	\$59,485 00	
Legal tender notes, 1862-63.....	346,681,016 00	
Certificates of Deposit.....	10,670,000 00	
Coin certificates, 1863.....	4,907,440 00	
Silver certificates, 1878.....	71,569,260 00	
Unclaimed interest.....		5,339 96
Fractional currency, 1862, 1863 and 1864 \$15,404,012 77		
Less amount estimated as lost or destroyed, act of June, 1879.....	8,375,934 00	
	7,028,078 77	

Aggregate of debt bearing no interest..... \$40,915,229 77 \$5,339 96

RECAPITULATION.		
	Amount Outstanding.	Interest.
Debt bearing interest in coin, viz:		
Bonds at 6 per cent., continued at 3½ per cent.	\$3,693,200 00	
Bonds at 5 per cent., continued at 3½ per cent.	177,062,900 00	
Bonds at 4½ per cent....	250,000,000 00	
Bonds at 4 per cent.	738,916,250 00	
Bonds at 3 per cent....	237,233,200 00	
Refunding certificates....	435,800 00	
Navy pension funds, 3 p.c.	14,000,000 00	
Debt on which interest has ceased since maturity.	\$1,421,341,350 00	\$12,219,712 97
	15,559,625 26	515,030 10
Debt bearing no int., viz:		
Old demand and legal-tender notes.....	\$346,740,501 00	
Certificates of deposit....	10,670,000 00	
Coin & silver certificates.....	76,476,650 00	
Fractional currency.....	7,028,078 77	
Unclaimed interest.....		5,339 96
	\$1,878,216,205 03	\$12,740,083 03
Total debt, principal and interest to date, including interest due and unpaid.....	\$1,890,956,288 06	
AMOUNT IN TREASURY.		
Interest due and unpaid.		\$1,532,344 05
Debt on which interest has ceased....		15,559,625 26
Interest thereon.....		515,030 10
Gold and silver certificates.....		76,476,650 00
U. S. notes held for redemption of certificates of deposit.....		10,670,000 00
Cash balance available Oct. 1, 1882.....		141,682,415 52
Debt, less am't in Treas'y Oct. 1, 1882.....	\$1,644,120,223 13	
Debt, less am't in Treasury Sept. 1, 1882	1,650,926,171 90	
Decrease of debt during the month.....	\$14,805,948 83	
Decrease of debt since June 30, 1882....	\$44,794,237 59	
BONDS ISSUED TO THE PACIFIC RAILROAD COMPANIES, INTEREST PAYABLE IN LAWFUL MONEY.		
	Amount Outstanding.	Accrued Interest not paid.
Central Pacific bonds, 1862-64 \$25,885,120 00	\$38,276 80	
Kansas Pacific bonds, 1862-64	6,303,000 00	94,545 00
Union Pacific bonds 1862-64	27,236,512 00	408,547 68
Cent. Branch Union Pacific bonds, 1862-64.....	1,600,000 00	24,000 00
West's Pacific Bonds, 1862-64	1,970,560 00	29,558 40
Sioux City & Pacific bonds, 1862-64.....	1,628,320 00	24,424 80
Totals	\$64,623,512 00	\$969,352 68
Interest paid by the United States, \$55,344,682.74; interest repaid by transportation of mails, &c., \$15,286,467.92; interest repaid by cash payments: 5 per cent net earnings, \$65,198.87; balance of interest paid by United States, \$39,403,015.95.		

The foregoing is a correct statement of the public debt, as appears from the books and Treasurer's returns in the Department at the close of business, September 30, 1882.

CHARLES J. FOLGER,
Secretary of the Treasury.

THE Chicago Inter-Ocean says that a manufacturer of railroad supplies is to be established at Garfield, a suburb two miles northwest of that city. It will be run in connection with the locomotive works now building there and controlled by the same men. Plans have been adopted for the works, which will be larger than any similar establishment in the country, and give employment to 1,000 men, who will be housed by the company in adjacent cottages. The construction of buildings will begin within a month, and the works will be operated early in the spring.

THE Indianapolis Journal says that what is known as the Royal Limited Express over the Pennsylvania Railroad, as ordinarily made up, represents over \$120,000, as follows: Engine, \$12,000; baggage car, \$1,200; smoking-car, \$5,000; dining-room car, \$12,000; five elegant Pullman cars, \$18,000 each, \$90,000. While this may seem to be an exception, the ordinary express trains represent \$83,000 to \$85,000. The average value of a freight train is still greater than that of a passenger train, when the value of the property carried is included. Sometimes the freight aggregates \$250,000 to \$300,000.

BALTIMORE and Ohio parlor and sleeping cars have commenced running through to Indianapolis over the new Indiana, Bloomington and Western connection.

THE steamship "Tacoma," recently built by Wm. Cramp & Sons, is owned by the Central Pacific Railroad Company and will be used for freighting purposes exclusively. She has compound engines and registers 3,500 tons. She will leave in a few days for the Pacific coast.

THE Harlan & Hollingsworth Company, of Wilmington, Del., have made a contract with the Northern Pacific Railroad Company, to build for them an immense transfer ferryboat, to convey a whole train of cars across the Willamette River in Oregon. The boat will be of iron, with paddle wheels and independent engines. The same firm has contracted to build a duplicate of the City of Worcester, to run on the same line.

THE iron twin-screw steamer, "Victoria," built to the order of a New York firm for freight trade with South American ports, was launched at the Pusey & Jones Company's works, Wilmington, Del., on the 23d inst. The dimensions of the vessel are: Length, 130 feet; breadth, 26 feet; depth of hold, 7 feet. The vessel will be driven by two compound engines, 12 and 21 by 18 inches stroke, with jet condensers and two locomotive boilers.

THE Shaw locomotive, which ran a mile in fifty-two seconds on the Camden and Atlantic Railroad while drawing a train of seven loaded passenger cars, has been withdrawn from service temporarily. There are certain repairs to be made, and after these have been completed the engine will be placed upon the Bound Brook Route. Drawings of the engine have been sent to London to be exhibited at a meeting of the Board of Directors of the London and Northwestern Railway.

ACCORDING to a St. Louis reporter, Miss Susan B. Anthony left that city recently for Leavenworth with two medium sized trunks for baggage. At first the baggage-master objected to check them both on a single ticket, and demanded pay for extra weight. "But," said she, "they together weigh less than the ordinary sized 'Saratoga.' I distribute the weight in this way purposely to save the man who does the lifting." The clerk looked at her incredulously. "And you tell me seriously that you do this simply out of consideration for the baggage-men?" "I do." "How long have you done it?" "All my life. I never purchased a large trunk, for fear I might add to the overburdened baggage-man's afflictions." The clerk walked off and conferred with the head of the department. Then the two returned together. "Do I understand," said the chief, "that you, of all women, have been the first to show humanity toward railroad people?" "That is a tenet of my creed." "Check that baggage," said the chief with emphasis; "and when you run for office, Miss Anthony, you shall have my vote." "Mine too," echoed the clerk, handing her the checks, and the trio parted, happy.

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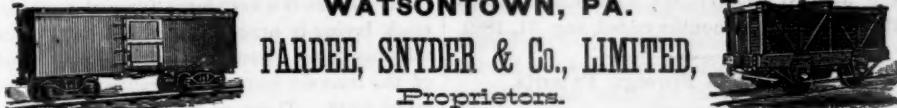
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On Monday last a new line of railway, giving the Southwestern Railway Company direct access to the Medway at a point nearly opposite to Queensborough, and which has been named Port Victoria, was opened for traffic. The powers to make this line, as stated by the London *Daily News*, were originally obtained by the Hundred of the Hoo Railway Company, whose rights the Southeastern directors acquired, and the line has since been constructed by their engineer, Francis Brady. At Port Victoria a pier has been built which is 450 feet long and 50 wide, with a depth of water 22 feet at the lowest spring tides, so that all but the very largest ocean-going vessels may take in and discharge cargo at all times. It is in contemplation to replace this by an entirely new pier to be constructed about 100 yards further out in the stream, which will be 600 feet in length, 60 in width, and with a depth of water of 27 feet. In that event the line just finished would be carried on by means of rails placed upon iron cylinders with lattice-work girders, so as to allow of the free flow of the tide, and trains would then be enabled to transfer their passengers and goods directly to the steamers and other vessels as they lay alongside the pier. The Southeastern Company has also acquired at Port Victoria something like 500 acres of land, a portion of which is intended to be utilized in the construction of docks which shall be capable of accommodating ships of the very largest tonnage, inasmuch as they will have a depth of at least 30 feet from the sill of the dock. It is claimed for the new harbor that it is perfectly sheltered from the sea and the winds blowing up Channel, by Garrison Point, near Sheerness, and ships making use of it will be saved from the risks attending the difficult navigation of the Thames. It is probable that the Southeastern Company will speedily establish a packet service between the port and Flushing, and in that case they look forward to securing a considerable Continental traffic in addition to their ocean-going trade.

Imports and Exports of the United States.

The Chief of the Bureau of Statistics at Washington, in his second monthly statement for the current fiscal year, of the imports and exports of the United States, reports that the excess of imports or of exports of merchandise was as follows:

Month ending Aug. 31, 1882, (excess of imports,) \$3,086,439; same time 1881, (excess of exports,) \$5,783,425; two months ended Aug. 31, 1882, (excess of imports,) \$14,453,467; same time 1881, (excess of exports,) \$16,394,361; eight months ended Aug. 31, 1882, (excess of imports,) \$53,890,497; same time 1881, (excess of exports,) \$114,394,327; 12 months ended Aug. 31, 1882, (excess of imports,) \$4,945,145; same time 1881, (excess of exports,) \$251,468,899.

The excess of imports or of exports of gold and silver coin and bullion was as follows: Month ending Aug. 31, 1882, (excess of exports,) \$2,147,204; same time 1881, (excess of

imports,) \$4,796,109; two months ended Aug. 31, 1882, (excess of exports,) \$7,975,435; same time 1881, (excess of imports,) \$4,618,887; eight months ended Aug. 31, 1882, (excess of exports,) \$41,437,318; same time 1881, (excess of imports,) \$27,429,541; 12 months ended Aug. 31, 1882, (excess of exports,) \$19,539,411; same time 1881, (excess of imports,) \$86,224,747.

The values of the imports of merchandise into the United States during the 12 months ended Aug. 31, 1882, were \$741,983,917, and for the corresponding months of the preceding year, \$643,248,555, being an increase of \$98,735,362 for the year ended Aug. 31, 1882.

The values of the exports of domestic and foreign merchandise from the United States during the 12 months ended Aug. 31, 1882, were \$737,038,772, and for the 12 months ended Aug. 31, 1881, \$894,717,454, a decrease of \$157,678,682 for the 12 months ended Aug. 31, 1882.

Domestic and Foreign Patents.

The *Official Gazette* of the United States Patent Office, published on the 3d inst., contains a decision of importance to inventors. The case was that of the Bate Refrigerating Company against Gillett, tried in the United States Circuit of New Jersey. The syllabus of the decision is as follows:

Section 4,887 of the Revised Statutes expressly requires the Commissioner of Patents to limit the term of a domestic patent for an invention previously patented in a foreign country to the period of time which the foreign patent has to run, or, if there be more than one such foreign patent, to so limit the domestic patent that it will expire at the same time with the one having the shortest term. The limitation is the same even if the domestic application was filed before the application for, or the grant of, the foreign patent, the word "previously," in the last clause of section 4,887 referring to time prior to the application therefor. The grant of a Canadian patent is to be determined by its date and issue, and not by the time of its delivery. The term of the domestic patent is limited to the term of the foreign patent in force when the domestic patent was granted, and is not prolonged by any subsequent extension of the foreign patent.

At the breaking of the ground for the Clinton and Point Caswell Railroad of North Carolina, on the 27th ult., fifty young ladies, from six counties, threw the first dirt, while a crowd of five thousand persons looked on.

MR. GEO. D. BENTON, of Boston, Mass., has invented and patented a system of electric lighting for locomotive head-lights and railway cars. Taking steam directly from the boiler he carries it to a steam chest on the platform in front of the smoke box. With two oscillating cylinders of very small size, with the pistons acting directly on a dynamo machine, he obtains 900 revolutions with 120 lbs. pressure of steam. The whole machine, with the steam chest, occupies but little space and is capable of lighting 27 incandescent lights and still have power to spare. Steps are being taken to place it on a through train running out of Boston.

How the Northern Pacific Railroad is being built.

ONE of the United States Railroad Commissioners, who has just returned from inspecting the Northern Pacific Railroad, says: "I went over the western section from Portland to the scene of the present track-laying east, a distance of 550 miles. I found construction proceeding with rapidity in the best possible manner. The cuts are wide, the sides clear and well sloped and guttered, the embankments broad and well built, and the roadbed as good as it can be made, and the ballasting perfect. Fast trains could be safely run over the entire line. The construction has been effectively done, and I do not hesitate to say that the Northern Pacific's western end is a first-class road. There is a very large force at work, and track laying is proceeding at the rate of one mile per day. There was a little delay at one of the tunnels, but no hindrance to the very rapid work. There will be an abundance of business waiting for the completion of the road. There will be a very large freightage from the interior to the Pacific, and a very large Eastern business. The mining and other resources of the country are rapidly developing, and no other transcontinental line has such brilliant prospects."

THE railroad bridge at Owego has been completed, and the Delaware, Lackawanna and Western trains are now running direct to Ithaca without using the Erie tracks.

Two suits have just been entered on the criminal docket of the United States District Court at Boston, in which the United States is the complainant, and in one of which the Fitchburg Railroad Company, and in the other the Boston and Albany Railroad Company, is the defendant. The complaint is made under an act of Congress relative to the transportation of live-stock on railways, and charges that the defendants have violated this law by forwarding swine and other cattle over their several roads and not giving them the prescribed exercise, food, water, etc. The maximum penalty is \$100 for each animal, but in these cases the sum sought to be recovered is \$10,000 in bulk from each corporation.

AN opinion was rendered in the Supreme Court of Illinois, on the 28th ult., in a case involving the questions as to the power of the State Legislature to regulate the rates charged by railroad companies for freight carried to points outside of Illinois, and whether the act prohibiting unjust discrimination in such rates is not in contravention with the Constitution of the United States. The case was one in which 66 per cent greater rate was charged for hauling freight from Gilman to New York than from Peoria to New York, although the distance from Peoria is greater by 86 miles. It was held by the Court that the charge was unjust, excessive, extortionate and unlawful, and in effect the Court upholds the authority of the Railroad and Warehouse Commissioners to regulate the freight charges from points in Illinois to points outside the State.